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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 43.]

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THE editor of the RAILROAD JOURNAL is pleased to receive information of railroad enterprises already entered upon or projected, items regarding the business done on the roads, such as relate to persons employed in the railroad and kindred interests; in short, about all matters which the readers of such a paper as this are gratified to find within its columns.

## PERSONAL.

W. F. MCKENZIE of the Central Vermont Railroad has accepted the position of Master of Transportation on the Mexican Central Railroad.

At a meeting of the directors of the Southwestern Railroad Company held at Macon, Ga., on the 30th ult., John E. Jones was elected to the presidency to fill the unexpired term of the late Gen. W. S. Holt. Vice-president Raoule was elected to fill the place on the board made vacant by the death of William M. Wadley. J. J. Gresham was elected to the place in the board made vacant by the promotion of Mr. Jones.

WALTER H. BARNES has been appointed General Superintendent of the Boston and Albany Railroad in place of Charles O. Russell resigned. He will enter upon the duties of his office December 1, 1882, with headquarters at Boston. Edward Gallup has been appointed Assistant General Superintendent, with headquarters at Springfield. He will enter upon the duties of his office December 1, 1882. Mr. G. will also have general charge of the passenger traffic.

## ORGANIZATION.

A preliminary organization was effected on the 26th ult., at Williamsport, Pa., for the construction of the Binghamton and Williamsport Railroad. The capital stock is fixed at \$3,000,000. The length of the line is 100 miles. The surveys are to be commenced at once.

At a meeting of the stockholders of the Toledo and Milwaukee Railroad Co., on the 27th ult., C. R. Cummings, of Chicago; C. S. Brice, of Lima, O.; General S. Thomas, of Columbus, O.; J. A. Latcha, of Cleveland, O., and James E. Neale, of Hamilton, O., were elected directors.

The directors of the Lowell Horse Railroad Company, recently elected are: W. E. Livingston, J. A. Goodwin, and J. A. Chase, of Lowell, Mass.; and G. F. Comstock and G. E. Kennedy, of Syracuse, N. Y. The officers are:

President, W. E. Livingston; vice-president, J. A. Goodwin; clerk, treasurer and superintendent, J. A. Chase.

At a recent meeting of the stockholders of the Cincinnati, Wabash and Michigan Railway Company, the following directors were elected: J. H. Wade, H. B. Payne, W. Bingham, C. P. Leland, R. E. Mix, W. S. Jones, C. E. Cowgill, J. A. Defrees, Norman Beckley, F. M. Gray and H. W. Williams. The officers are: President, J. H. Wade; vice-president, W. Bingham; secretary and treasurer, W. S. Jones, and Norman Beckley, general manager.

At the annual general meeting of the Credit Valley Railway, held at Toronto, Ca., on the 26th ult., the following gentlemen were elected directors for the ensuing year: G. Laidlaw, E. B. Osler, R. Hay, M. P., J. L. Morrison, Wm. Arthurs, John Burns, P. D. Conger, W. J. Baines and Chas. D. Rose (London, Eng.) At a meeting of the directors held subsequently, George Laidlaw, was appointed president, and E. B. Osler vice-president for the ensuing year. John Burns was appointed to act as chairman in the absence of the president and vice-president.

## CONSTRUCTION.

A STREET railway for Petersburg, Va., is projected.

WORK is progressing on the Chatteroi Railway in Kentucky.

The general manager of the Tehuantepec Railroad, who is an American, has left the City of Mexico for the Isthmus, and the work of construction will commence at once on the Pacific side.

The North Shore Railway Company has commenced to lay out a new line, which, by crossing the River St. Charles, will enable trains to run wholly around the outskirts of St. Rochs until they enter the station at the Palais.

A SURVEY is being made for an extension of the Canada Southern Railway to Niagara Falls from Welland, twenty-three miles west to Buffalo, which will shorten the line to the Falls twelve miles and lengthen that to Buffalo four miles.

The entire length of the railway from Esquimalt Harbor to Johnston's Straits in British Columbia will be about 150 miles, running nearly the whole distance through exceed-

ingly fertile lands. The section from Esquimalt harbor to Nanaime must be completed, according to the terms of the contract, by July 1, 1886; the other section, from Nanaime to Seymour, on Johnston's Straits, must be in working order by July 1, 1890.

WORK has been commenced on the East Brownsville Branch extension, which is to run from the Redstone Branch along the east shore of the Monongahela River into Brownsville. The work is to be completed by the first of next year.

The last rail was laid on the extension of the Cincinnati, Wabash and Michigan Railroad, from Goshen, Ind., through Elkhart to Benton Harbor, Mich., on the 25th ult. The road is now complete from Anderson, Ind., to Lake Michigan.

The Pittsburgh, McKeesport and Youghiogheny Railroad is fast approaching completion. The stone work and almost all the grading are finished between Pittsburgh and Monongahela City, and the iron work on the McKeesport bridge is being put up.

The latest action on the part of the South Eastern Railway Company has been to purchase a controlling interest in the St. Johns and Chamby Railway, and it is stated that the work will be begun within three weeks and the road be in operation by June 15, 1883. From the terminus, behind the Merchants' Bank at St. Johns, the line will run along the wharf to the locks, then through St. Paul street and away down the Richelieu River to Chamby. It is expected to be continued thence to Varennes, where it will connect with the Montreal and Sorel Railway; and a road from St. Johns to Rouses Point, to compete with the Grand Trunk Railway, is also spoken of.

MAJOR A. J. TWIGGS, of Augusta, Ga., has made a contract with the directors of the Georgetown and Lanes Railroad Company for the building and equipment of a railroad from Georgetown to Lane's depot, on the Northeastern Railroad in South Carolina. The length of the line is 38 miles, and the construction of the road will give Georgetown her only railway connection and open up a fine country. The work is to be completed by Nov. 1, 1883. The contractor is to receive a private cash subscription of \$25,000 made by the municipality of Georgetown, and first mortgage bonds of the railroad company sufficient to cover any additional cost of construction that may be incurred.

AMONG the subjects that will be brought to the notice of the directors of the Hannibal and St. Joseph Railroad Company at their next meeting, will be the proposed extension of the road from Quincy to Chicago, a distance of 257 miles. The engineer estimates that it will cost \$20,000 a mile to build, and that one year will be occupied in its construction. The preliminary survey has been made. The Chicago, Hannibal and St. Joseph Railroad Company was organized two years ago to build the road, with a capital placed at \$6,000,000. If constructed, the road will be built in the interest of the Hannibal and St. Joseph, and Missouri, Kansas and Texas, to form a link for through business.

#### INCORPORATION.

The Miller Car and Cattle Company, of Oxford, N. Y., with a capital of \$225,000, has filed a preliminary certificate of incorporation with the Secretary of State at Albany.

The San Andreas Mining and Smelting Company of New Mexico filed its incorporation certificate at Washington, D. C., on the 30th ult. Saul Strong, J. B. Archer and others are the corporators. Four million dollars is put down as capital.

ARTICLES of incorporation were filed last week with the circuit clerk at Metropolis, Illinois of the Chicago and Paducah, and the Paducah, Metropolis and Chicago railroad companies. The latter road will connect Metropolis with Wetaug on the Illinois Central Railroad. The incorporators are W. R. Brown, E. P. Curtis, R. W. McCartney, J. W. Thrift, W. H. Green, J. C. Willis and A. D. Davis. Capital stock, \$500,000.

The San Francisco and San Rafael Railroad Company has been incorporated to construct and operate a railroad from the junction with the San Francisco and North Pacific Railroad, on Tamalpais avenue in San Rafael, by the most practicable route to a point on or near Tiburon Point on Raccoon straits, a distance of about nine miles; thence by a ferry to San Francisco, a distance of about six miles. Capital stock \$500,000, divided into 5,000 shares of a par value of \$100 each. The directors are: Peter Donahue, James M. Donahue, Arthur Hughes, T. I. Bergin, and Thomas Donahue.

ARTICLES of incorporation of the Chicago, Indiana and Ohio River Railroad Company were filed in the office of the Secretary of State of Indiana on the 26th ult. The proposed line commences at Hammond, Lake county, where connection is made with belt lines for Chicago, running southeast through Lake county, crossing Kankakee River four miles east of the State line, thence due south through Newton county, through to Lake Village, Morocco and Kentland. Thence due south through Benton and Warren, forming connection in Vermillion and Fountain, for the Fountain county coal fields and for Terre Haute and Ohio River. The first board of directors are William Foster, Andrew Hall, William Darroch, James DeWolf, Joseph Law, John Peacock and Greenbury W. McCray. The parties interested in the project state that they propose to be a part of a Chicago line through a connection with the Indiana, Bloomington and Western road.

#### New York, Susquehanna and Western Railroad.

THE formal opening of the New York, Susquehanna and Western Railroad took place on the 27th ult., when an excursion party comprising about 400 persons passed over the road in ten new cars from the Pennsylvania depot to Stroudsburg, Penn., via Two Bridges, N. J., as the guests of the new company.

The New York, Susquehanna and Western Railroad Company was organized under the General Laws of the States of New Jersey and Pennsylvania by the consolidation of the following companies on the 25th of May, 1881: The Midland Railway Company, of New Jersey, the Midland Connecting Railway Company, the North Jersey Railroad Company, the Water Gap Railroad Company and the Pennsylvania Midland Railway Company.

The following are the lengths of the lines of road owned and operated by the New York, Susquehanna and Western Railroad Company:

	Miles.
From West End, Jersey City to Unionville, N. Y.	71.6
From Two Bridges, N. J., to Stroudsburg, Pa.	42.0
From Columbia, N. J., to Delaware Station	3.0
The Paterson City spur	1.0
The line from Blakely to the Delaware, Lackawanna and Western, near Scranton	12.0
From Unionville to Middletown, N. Y., leased	13.9
Total mileage opened and operated, exclusive of sidings	141.5
Sidings	21.0

The gauge of the road is 4 feet 9 inches, the road being laid with 60-pound steel rails for 87 miles, from West End, N. J., to Stroudsburg, Pa., and 54½ miles with iron rail. Five hundred new twenty-ton coal cars are in course of construction, giving an extra capacity of 10,000 tons a week in rolling-stock. Extensive coal properties located in the Lackawanna Valley are under the control of the company, insuring it a tonnage of more than one and a half million tons per annum. The following are the particulars:

	Tons.
Pennsylvania Anthracite Coal Company, about four hundred acres of coal property, in fee and under lease	300,000
From the new shafts of John Jermyn	200,000
Lackawanna Coal Company (limited)	200,000
Filer and Lively	100,000
Winton and Dolph	300,000

Total.....1,100,000

The directors of the new company have expressed their intention of marketing their coal through the usual trade channels, and will favor no monopoly of the supplies coming from the mines under their control. The transit of the coal will be from the terminus at Stroudsburg to the neighborhood of Scranton, thence over the Delaware, Lackawanna and Western Company's line to the docks at Hoboken. This transit will be effected under an equitable agreement between the two corporations, to which no limit of time has been prescribed, and is based on the selling price of coal at tide-water.

The capital stock of the company is divided into \$8,000,000 preferred and \$13,000,000 common, with \$2,500,000 first mortgage bonds and \$600,000 debenture bonds on the property of the company. A controlling interest in the Pennsylvania and Anthracite Coal Company and other valuable franchises is owned by the company.

A junction of the new line to Sparta, connecting it with the Lehigh and Hudson River Rail-

road, in the opinion of the engineering and mineralogical experts who accompanied the excursion, will in the near future develop an enormous coal trade and prove a great source of wealth to the new company.

The following are the directors of the New York, Susquehanna and Western Railroad Co.: F. A. Potts, Simon Borg, G. A. Hobart, Charles Menzesher, Henry Marks, R. T. McCabe, W. S. Dunn, of H. B. Clafin & Co., J. S. Rogers, of Rogers Locomotive Works, Charles Siedler, of Lorillard & Co., R. K. Dow, J. L. Farwell, R. S. Chapel, W. A. Tower, of Tower, Gedney & Co., Boston.

The officers of the company are: President, F. A. Potts; vice-president, W. S. Dunn; treasurer, R. S. Chapel; Secretary, J. P. Rafferty.

IRON ship building is increasing at Cleveland.

A PATENT has been issued to Mr. Francis J. Carney, of Brooklyn, N. Y., on an improved steam valve, which consists of an externally threaded plug, with openings on the sides, and internally threaded valve-box of such size as to allow the plug to screw tightly into it. Suitable provision is made for packing the valve stems. In this steam valve the plug is never wholly removed, and no dust can therefore enter the valve.

It is announced that the New York, Chicago and St. Louis Railroad Co. has completed arrangements by which its trains will run from Buffalo, over the New York, Lake Erie and Western Railroad, to Elmira, and thence over the Lehigh Valley Railroad to this city; and when the latter road is completed to Buffalo, trains will run direct over its track from the terminus of the New York, Chicago and St. Louis Railroad.

THE Gilbert Car Works, in East Buffalo, N. Y., are employing 400 men on full time. Two United States mail cars, sixty feet in length, for use on the Buffalo, New York and Philadelphia Railroad, have just been turned out, and 200 new freight cars are being made for the New York, Lake Erie and Western. The Mexican Central has ordered 420 iron trucks, and the Maine Central line, which has just leased the European and North American railroad, running from Bangor to the Nova Scotia coast, and expected to have its southern termination at Boston before long, has ordered 200 cars.

THE Passenger Agents of the Chicago, Milwaukee and St. Paul Railway are said to be very proud of the six new palace dining-cars recently introduced on the line of that road. They pronounce them the "handsomest dining-cars ever built." They are now running between Chicago and St. Paul and between Chicago and Council Bluffs. They were constructed by the Harlan & Hollingsworth Company, of Wilmington, Del., and no expense has been spared to make them attractive and luxurious. The cars are under the management of the Pullman Company, and represent in all their departments the last and best results of mechanical and artistic efforts for the safety and comfort of the traveling public.

## Mobile and Ohio Railroad.

The earnings of the Mobile and Ohio Railroad Company for the years ending June 30, 1881 and 1882, were as follows:

	1881.	1882.
From freight	\$1,791,502 66	\$1,617,932 23
" passengers	416,126 95	401,701 51
" mails	36,555 08	31,038 80
" express	46,780 00	46,930 00
" miscellaneous	86,852 35	66,651 93
	<hr/> \$2,377,817 04	<hr/> \$2,164,274 38

## Expenses:

Transportation	\$575,815 80	\$566,237 93
Equipment	303,263 03	293,584 15
Roadway	476,307 56	487,956 68
General	207,099 77	224,366 93

\$1,562,486 16

Net earnings..... \$815,330 88

\$562,128 69

Compared with the previous year the earnings of 1881-'82 show a decrease of \$213,542.66, with an increase in expenses of \$39,659.53, making a decrease in the net earnings of \$253.202.19.

The total number of miles of road owned and operated during the last fiscal year was 527, viz: Main Line (including the Cairo Extension, which, however, has only been in reliable operation since May 1,) 493; Columbus Branch, 14; Starkville Branch, 11; and Aberdeen Branch, 9. There are also 49 miles of side track, making the total number of miles of track to be maintained 576. The 493 miles of main track are located by States as follows; in Alabama, 61; in Mississippi, 272; in Tennessee, 119; and in Kentucky, 41. The 34 miles of branches are all in Mississippi.

Of the 493 miles of Main Line, 280' are laid with steel rails (including the Cairo Extension), leaving 213 miles of Main Line, 34 miles of branches, and 49 miles of sidings laid with iron rails in good and safe condition. During the past year 288,774 new cross ties have been laid, and 31.13 miles of steel rails have been substituted for iron.

The equipment of the road, which has been maintained in good condition, consists of 75 engines, 28 passenger, 2 special, 10 baggage and mail, 6 express, 1,227 freight and 80 construction and caboose cars; of these 3 passenger and 67 freight cars have been added through the operation of a car trust. It is the purpose of the company to make additions thereto from time to time by means of the car trust system.

The present indebtedness on account of the equipment thus far added by means of the car trust is \$50,405.47, which, with the interest thereon, will be met by monthly payments of \$854.33, charged as paid in operating expenses. There will be added during the current year 8 mogul engines, contracted for with the Baldwin Locomotive Works, at an aggregate cost delivered of \$100,000, to be paid for by 60 monthly payments of \$1,650 each, to be charged in like manner as paid in operating expenses.

The number of miles of road operated at the close of the year was 527, against 506 at the close of the preceding year. Mileage of passenger trains, 418,704; freight trains, 737,015; construction trains, 220,774; switch, etc., 116,809—total, 1,493,302, against 1,531,441 in 1880-'81. Number of through passengers carried, 21,400; local do., 282,552—total, 303,952. Number of passengers carried one mile, 12,409,125, against 11,312,655 in 1880-'81. Average miles

per passenger, 40.8. Tons of freight carried north, 138,907.9; do. south, 206,846.8—total, 345,754.7. Number of tons carried one mile, 75,184,535, against 86,956,914 in 1880-'81. Average miles per ton, 217.4. Earnings per mile of road, \$4,106.78; expenses, \$3,040.12; net, \$1,066.65. Percentage of expenses to earnings 74.03, against 65.71 in 1880-'81—an increase of 8.32, which is attributed to higher cost of fuel and materials generally, forced irregularities and suspensions of service, and diminution of local business. The number of bales of cotton transported was 232,230, exceeding the number carried in the preceding year by 1,281, but the amount from local stations was materially reduced, while the through north bound from competing points was correspondingly increased. These facts amply explain the increase of expenditure as compared with earnings, from this exceptionally important source of revenue. The transportation of materials used in the completion of the Cairo Extension was free, thus further increasing the ratio of expenses to receipts. But notwithstanding all these disadvantages the revenue has largely exceeded the fixed charges, and the company has reason consequently, with increased facilities, to enter hopefully upon the new and unburdened year.

The receipts from sales of lands amounted to \$52,005.25, against \$49,336.13 last year.

The income of the company (including \$2,796.69 from the previous year) was \$2,167,071.07; from which deduct operating expenses, \$1,602,145.69, and interest on first mortgage and Cairo extension bonds, \$456,000, leaving a balance of \$108,925.38; of which \$53,000 was appropriated to the payment of 1 per cent on \$5,300,000 1st preferred income and sinking fund bonds, September 1, 1882, and a like amount February 1, 1883, leaving a surplus of \$2,925.38 to credit of earnings for 1882-'83.

The capital stock of the company authorized by its charter is \$10,000,000, of which there has been issued \$5,320,600.

The funded debt June 30, 1882, stood as follows: \$7,000,000 1st mortgage 6 per cent bonds of 1879, due 1927, secured by a first lien upon the main line from Mobile, Ala., to Columbus, Ky., 472 miles; \$600,000 6 per cent bonds of 1880, due 1892, secured by a first lien upon the Kentucky and Tennessee Railroad (Cairo extension), 22 miles, and by a sinking fund of its gross earnings; \$8,650,000 7 per cent preferred income and sinking fund debentures, in four series, viz: \$5,300,000 first, \$1,850,000 second, \$600,000 third, and \$900,000 fourth—secured by a first lien upon, and sinking fund of, the proceeds of 1,143,342 acres of land and other real estate belonging to the company, and not necessary for the operations of the road, the same being held in trust by the Farmers' Loan and Trust Co., Trustees. The interest in multiples of 1 per cent, but not exceeding 7 per cent per annum, is payable out of the net earnings of each year remaining after the payment of operating expenses and the fixed interest charges, and is paid on or before the first day of February next preceding the termination of each fiscal year, but only if earned, and is not cumulative.

During the past year there has been added

to the sinking fund \$68,500 of the 1st preferred debentures, at a cost of \$65,031.87, realized from the sales of lands, etc., making the total amount of the sinking fund June 30, 1882, \$200,500.

The company has no floating debt beyond the current expenses of the month, which are paid on or before the 15th of the next month. It has, however, guaranteed an advance of \$100,000 on account of the Cairo Extension over the amount realized from the sale of the bonds issued for its construction, but said amount is covered by securities specifically held in trust. This excess of expenditure is explained as follows: interest during construction, \$36,000; transfer steamer, equipment, etc., \$50,929.01; incline locomotive, \$8,825; sundries, \$4,255.99—making the cost in cash of the extension, with the before-mentioned terminal additions, \$640,000.

## CONDENSED BALANCE SHEET, JUNE 30, 1882.

Cost of road and equipment	\$20,812,281 40
Land department	617,153 79
Sinking fund—1st pref. debent.	200,500 00
Cash in treasury	40,428 32
Current accounts	71,032 40
Funds on special deposit for matured coupons and debenture dividends	43,124 50
Materials on hand	325,831 12
Stocks and bonds in Treasury	9,680 00
Car Trust, Series A	50,405 47
Total	\$22,170,437 00
Capital stock	\$5,320,600 00
Funded debt	16,250,000 00
Bills and pay-rolls, June	99,777 18
Foreign Railroad balances	3,212 52
Interest due and accrued	78,124 50
Trustees car trust	50,405 47
Profit and loss	368,317 33
Total, as above	\$22,170,437 00

President.—W. BUTLER DUNCAN.

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Vice-Pres't and Gen'l Manager.—A. L. RIVES.

Secretary and Treasurer.—HENRY TAOON.

Ass't Sec'y and Transfer Agent.—CHAS. WALSH.

THREE hundred dollars a year gives a spacious and elegant residence in the Azores. Servant wages are \$2 to \$5 a month; one cent a pound buys the finest grapes; meat and chickens cost about fifty per cent less than here; fish is excellent and abundant, and vegetables are plenty and cheap.

THE bridge which is to be built across Brandywine Creek by the Baltimore and Ohio Railroad Company will be of iron with stone piers, and will be 1,300 feet long. Arrangements are now being made to quarry the stone on both sides of the creek. The masonry will be done by the day and not by contract, and the iron work will be done at the company's mill in Baltimore.

We acknowledge hereby the receipt of a pamphlet of twenty-four pages giving an exhaustive account of W. H. Cory's Artificial Fuel and press for use in its manufacture. The pamphlet is a reprint of a paper read before the Engineer's Club, of Philadelphia, October 7, 1882. It is a useful production, and all interested should procure a copy. The author is a resident of Philadelphia.

# AMERICAN Railroad Journal

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We invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, which may come to their knowledge, and are adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our reports may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining Interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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## WHO BOUGHT THE "SENEY" ROAD?

THE event of the week is the reported transfer of a controlling interest in the New York, Chicago and St. Louis Railway, otherwise known as the "Nickel Plate." There seems to be no doubt that prominent members of the syndicate have parted with a sufficient amount of the common and preferred stocks to surrender the control. The purchasers are said to be J. H. DEVERAUX, President of the Cleveland, Columbus, Cincinnati and Indianapolis Railway, and STEPHENSON BURKE, Vice-President of the Columbus, Hocking Valley and Toledo Railway. Both of these last mentioned roads have intimate relations with the New York Central and Hudson River Railroad, and it is not surprising that the public takes it for granted that the purchase is virtually made in Mr. VANDERBILT's interest, if not directly by him—although even this is left in some doubt.

If true, this is the most conspicuous instance in this country, or in the world, of a railroad being built on speculation—that is to say, being built with the intention of selling it to a rival; and it is creditable to the foresight of the projectors that they so laid their plans and located their line that it was deemed wiser by Mr. VANDERBILT to buy it up than to allow it to compete with his roads. It raises the question, however, as to how far this process may go on. What is to prevent this same syndicate, or some other, from starting another road parallel to one of Mr. VANDERBILT's with the same expectation? Is it not an inducement for some one to parallel the Pennsylvania Railroad, or any of the other great trunk lines which are not already paralleled? It introduces a new feature into the railroad and financial problem of the country. Mr. VANDERBILT now finds himself with three roads all the way from Buffalo to Chicago. One would suffice if it were double-tracked; and the supposition naturally is that Mr. VANDERBILT will now be willing to let go the Canada Southern if he can do so without loss.

Who is to take it? There are the Grand Trunk, a rival line; and the New York, Lake Erie and Western, and the Delaware, Lackawanna and Western, to either of which it would serve as a feeder. The most likely purchaser, however, would be the Wabash, St. Louis and Pacific, which is reported to have made an offer for the "Nickel Plate." If the Canada Southern could be had by the Wabash, it would complete its line to Buffalo; and the Delaware, Lackawanna and Western, under substantially the same owners, would make up a line all the way to New York City. The checker board

presents an interesting study, and new moves may be expected before long.

A later rumor credits the Lehigh Valley with being interested in the purchase of the "Nickel Plate." This company has lately made an arrangement with the New York, Lake Erie and Western for trackage from Elmira to Buffalo for through coal, freight and passenger trains; but it is improbable that it can have secured the line west of Buffalo. By an alliance with the Central of New Jersey (not now a difficult matter, and desirable on many grounds) the Lehigh Valley might at an early day make up a fifth competitor for the business between New York and the Niagara River.

## SOUTHWARD TRANSFER OF MATERIAL AND POLITICAL POWER.

AN article entitled "The Railway Invasion of Mexico" in *Harper's Weekly Magazine* of October, by Hon. JOHN BIGELOW, has attracted deserved attention, not merely on account of the eminence of the writer, but also from the remarkable statements it contains as to the financial and political relations of this country with our sister Republic. The paper was evidently written with a purpose, and there has been much ingenious speculation wasted in attempting to divine what that purpose was. Nobody credits Mr. BIGELOW, or the parties whom he may represent, with the benevolent intention of trying to save the American public from any loss which it may incur from the building of railroads in Mexico. Mr. BIGELOW's antecedents, and his familiars, do not justify such disinterested motives. Two objects are quite plain throughout the article; one of which is a purpose (this is the most pertinent) to create such distrust in the minds of capitalists about securities based on the Mexican railroads as will prevent investments in that direction, and thus break down the credit of the present promoters; and, second, to arouse a spirit of jealousy in the minds of Mexicans as to the effect the railroads will have upon them. Not being a capitalist himself, the suspicion arises that there are capitalists behind him who desire to take advantage of this distrust so created. It may be that it is a sort of preliminary bearish attack upon some of the Mexican properties, so that they may be the more easily acquired.

The particular property which meets the force of Mr. BIGELOW's attack is the Mexican National Railway, or, as it is commonly called, the "Palmer-Sullivan Concession." Gen. PALMER is understood to be a large borrower of money for carrying on his works, both in London, New York and Mexico; and it may be that

Mr. BIGELOW's effort is only one of a concerted system of attacks to break down that gentleman, both in Mexico and in Colorado. Thus far, however, its success in that direction is not remarkable.

Ex-minister ROMERO and others have taken upon themselves the task of correcting the misstatements and mis-inferences of Mr. BIGELOW's article, for which there was abundant opportunity. In the first place it is shown that the older railroad between Vera Cruz and the city of Mexico, instead of being a bankrupt or non-paying enterprise, has lately become very profitable, and that its securities are quoted in London at a considerable premium. The great truth stands out that Mexico in a state of peace and industry is a very different place from Mexico distracted by foreign and internecine wars, and by the inaction which the presence of war is sure to produce. If the Mexicans themselves exhibit no jealousy at Americans building their railroads for them, surely it is hardly necessary for one of our own number to incite them to it.

But there is another class of commentators upon the Bigelow article. Certain journals in the West and South, and noticeably the Galveston and New Orleans papers, persuade themselves that the course of railroad development having pushed as far as it can in a westerly direction, has now taken up its march toward the southwest, and that in the race for new business the extension of the great trunk lines must cross into Mexico and keep on until they reach the Central American Isthmus. It is contended that the center of commerce and production has already passed by Chicago and St. Louis, and is now sweeping on southwestwardly toward the Mexican line; and that hereafter the great material development will be in the territory which formerly was New Spain, and which is now Texas and Mexico. There is a small foundation of truth in this remark, for it is evident that Texas is a veritable empire in itself, and that Mexico possesses in its soil, climate, streams and mines all the elements which have contributed to build up so rapidly the population, wealth and trade of our western territories, and especially of California. With scarcely an exception, the American construction forces that are penetrating Mexico are being met with kindly reception. The jubilation attending the opening of every new stretch of road is but the beginning of a further interchange of ideas and of products with our Latin neighbors. We must not forget that a large proportion of the entire Mexican population is a mixed or Indian blood, although the descendants of Spaniards continue to hold places of power and influence. The effects of universal

suffrage and general education are beginning to be felt among the native races, and in a few generations they will be the bone and sinew of the laborers, and the Spanish influence will relatively decline.

Mexico is fast taking on the symbols and character of the more advanced nations. Besides her railroad system, she has recently provided for the establishment of banks, trust companies, stock exchanges, safe deposit companies, telephones, electric lights, and a variety of other American appliances.

When the two railroads shall have reached Mexico that are now well under way, the intercourse will be much closer and, commercially and financially speaking, the Republic of Mexico will have been annexed to our system. It is to be hoped that by that time the Government of Mexico will feel itself strong enough to make some compromise with the holders of its bonds, some of which are held in this country, but the greater part in Europe. It should be among the first duties of the Republics of the world to see that their credit is maintained at least as well as the credit of monarchies under similar circumstances. No doubt the Mexicans themselves would rather see their securities, national and corporate, dealt in at the New York Stock Exchange than at London or Paris. If the disparities in the two tariff systems could be simplified, there is no doubt that the United States would have the preference in Mexico instead of the British and Germans who now contest it with them.

#### Southern Pacific Railroad.

It has perhaps occurred to many of our readers that the Southern Pacific's own line via San Antonio is being delayed longer than was anticipated. The reason is not merely heavy rock cutting, but heavy bridging. The bridge across the Pecos River is likely to require some time yet, but false work is to be erected, about 300 feet long, which need not delay the track-layers from this direction more than three weeks. A tunnel is, we believe, yet incomplete, but we do not suppose there is any reason to cause delay much beyond the middle of November. The San Antonio *Express* reports the conclusion of the labors of S. B. Mosby, Division Engineer, and his assistants, leaving only two parties of engineers in the field. The ends of the track are only fifteen miles apart. This end is completed to the Pecos River, 799 miles west of New Orleans, and the west end is finished to a point which can scarcely be less than 440 miles east of El Paso. Lozier, the last station which we have seen named, is 358 miles east, and track-laying has been continued more than two months since that point was reached. Strobridge took off his three thousand Chinese workmen, the drilled force with which he has built the Southern Pacific thus far, and went back with them to California to

rush forward the construction of the line from Mohave Junction to The Needles, on the Colorado River, about 250 miles, where he is to meet the Atlantic and Pacific track coming from Isleta in New Mexico. We don't know what force is left on this end, near Eagle's Nest, but presume it is quite small, as the rock work and bridging would cause such delay that track-laying could not be utilized. The rock cutting must have been heavy all the way from Del Rio, 747 miles west of New Orleans. Workmen have been blasting off overhanging rocks along the road thence to Devil's River, 14 miles further west. They had blocked the movement of trains by falling on several occasions, and the expense of removing them was considerable, to say nothing of the danger of their falling on passing trains. The trip between Devil's River and Eagle's Nest, a distance of 56 miles, will always be a great pleasure to travelers, because the extraordinary curves and bends will both necessitate slow movement and exhibit the splendid scenery to the greatest advantage. The *Express* says that from Seminole to River Bend, fifteen miles, the track hugs the river at an elevation of 200 feet above water. The altitude above sea level is about 1,500 feet, and the air is delightful. We suppose the Seminole referred to is about ten miles this side of the Pecos. On the other side of the Pecos the bridging is heavy.

Seven hundred and ten miles west of New Orleans the road to Eagle Pass diverges. Track-laying began at the junction August 25, and as the distance is scarcely 35 miles, it ought to have been completed, and no doubt will be in a few days. At Eagle Pass connection will be made with the Rio Grande and Pecos Railroad, coming up the river from Laredo and already finished as far as Gov. Hunt's great coal mines. The Mexican National will lay a third rail on this road, and use it between Laredo and Eagle Pass, at which latter place it expects to meet the Texas and St. Louis narrow gauge, if we are not mistaken. The destination of this latter road must have been changed, as it was formerly said to be going to Laredo. The Southern Pacific, on arriving at Eagle Pass, will doubtless cross the river at once and prosecute its important Mexican undertaking, under the Frisbie and Huntington concession, which will give it a road to the city of Mexico by way of the rich Laguna and Nazas country, through the finest wheat-raising section of Coahuila. The distance from New Orleans to the crossing of the Rio Grande at Eagle Pass is about 745 miles. The distance from New Orleans to Eagle's Nest is about 817 miles. The Southern Pacific we suppose to be three or four miles this side of Eagle's Nest.—*New Orleans Picayune*.

THE "attitude" we take towards our critical friend who issues the result of his lucubrations from St. Louis, is one of cordial good-will. He will pardon us, we hope, for reminding him of the huge English navy whose shrewish little wife was accustomed to "baste her lord and master most confoundedly." When a friend expressed to him his surprise that he should permit the little woman this injury to his marital dignity, the navy replied: "It amuses her, and don't hurt me." This is exactly our "attitude" towards that paragraphist of the *Western Insurance Review* who undertakes the censorship of our use of the English language.

## OUR CANADIAN LETTER.

[From our Special Correspondent.]

CANADA ATLANTIC.—CABLE UNDER LAKE SUPERIOR.  
—CANADIAN WINTER PORT.—RAILROAD AND OTHER NOTES.

## CANADA ATLANTIC.

THE Canada Atlantic and Grand Trunk railways entertained the Montreal and Ottawa Press at the Russell House, Monday, Oct. 30. A very pleasant time was passed, speeches and toasts given. At 4.30 p. m. the Montreal gentlemen left Ottawa on a special train escorted by the Ottawaites, who returned to the Capital this morning by same train.

The Canada Atlantic will run three trains daily each way between Ottawa and Coteau Landing.

This railway-bed, equipment, etc. is pronounced first-class in every respect. The station and grounds are lighted by electricity.

Eleven miles from the Vermont frontier are graded; 45,000 ties made and on the ground, and nearly all the steel rails have arrived.

There are five through bridges, constructed of iron and steel girders, and about six half-deck bridges between Coteau Landing and Ottawa.

The governing grade eastward is 30 ft. to the mile. Westward it is 40 ft. to the mile.

The new Dominion four-dollar notes just put in circulation were engraved by the British North American Bank Note Company of Montreal, and are a credit to that company; the paper is excellent. The words "Dominion" and "of Canada" being the water-marks in the paper, running diagonally, while the maple leaf, thistle, clover and rose are placed at the angles. The note face is in red, black and green, vignette of Marquis of Lorne in center. The word "Four" is plentifully scattered around the edge, forming a border, and they are signed by J. M. Courtney for the Receiver-General. These bills are redeemable at any of the Government depositories, and not as heretofore at one particular point.

## MANITOBA AND NORTHWEST NOTES.

At a meeting in Emerson held last Monday against the disallowance of the Manitoba Railway charter, it was said that (while speaking of the Emerson and Northwestern Railway charter) Mr. Norquay, Premier of Manitoba, said that if it were disallowed by the Dominion Government, the local legislature would be convened at once and the charter re-enacted.

The case of General Rosser vs. Canada Pacific Railway is going on at Winnipeg. The damages for arrest claimed are \$50,000.

Sir Charles Tupper, minister of railways and canals, who returned last week from a trip over the Canada Pacific, states that the country, generally speaking, looked extremely well; that Winnipeg is growing great very rapidly and will be the Chicago of the northwest. Sir Charles says the C. P. R. is being constructed with great rapidity and in a substantial manner.

It is probable that government will grant the city of Ottawa further water privileges to encourage the establishing of manufactories.

The stockholders of the North Shore and Salisbury Junction Railroad hold a meeting Nov. 9th to elect directors and organize.

Mr. Charles Winter, well known in Canadian business circles, takes charge of the Moncton, N. B., Knitting Factory Works.

## RAILROAD NOTES.

Mr. Taylor, treasurer of the Canada Southern Railway, in reply to a delegation, stated that the C. S. R. would build a branch from Essex Center to Leamington if a bonus of \$50,000 was given. He also advanced \$40 toward expense of a preliminary survey.

Trains are expected to be running on the Essex Center cut off by December 1st.

Travelers, and the public generally, who have been induced to take the trip over the Canada Southern to Toronto via Credit Valley, are very indignant against the latter company, who, after advertising that a train would connect with the C. S. R., leaving St. Thomas at 5.10 a. m., have discontinued the train, and parties have to lay over or go a round-about-way at considerable expense.

The Canada Pacific have received three splendid locomotives from the Rogers Locomotive Works of Paterson, N. J.

The government arbitrators in the case of Peters, Moore & Wright, contractors of Harbor Works, Montreal, who claimed \$124,000, award them \$118,000.

## CABLE UNDER LAKE SUPERIOR.

An important question will be brought up at the next meeting of the Great Northwestern Telegraph Company. It will be that of laying a cable under Lake Superior, thus giving direct communication with Manitoba, instead of via Chicago. The proposed line will probably start from Parry Sound across the Georgian Bay to Manitoulin Island; thence to Sault Ste. Marie, thence under Lake Superior to Thunder Bay, and thence to Winnipeg. In connection with this the Government are considering the laying of a cable under the lake, the western terminus being Prince Arthur's Landing, thus giving another connection with the far west by the Canadian Pacific Railway and Government system; and at the eastern end the Government telegraph line would be so built as to give a direct line to the Maritime Provinces. The proposed cable under Lake Superior will be 600 miles long, and cost \$400,000.

The traffic report of the Midland Railway, of Canada, for the week ending October 21, was: passengers and mails, \$6,666.15; freight, \$21,613.86; total, \$28,280.01, as compared with \$25,355.47 for corresponding week last year, being an increase of \$2,924.54, and the aggregate traffic to October 21 is \$860,384.83—an increase of \$171,319.08 over 1881.

The Napanee, Tamworth and Quebec Railway, owing to the absconding of the contractor last year, etc., has been at a standstill, but it is expected that the work of construction will shortly go on.

The Dominion Bridge Company has declared a dividend of five per cent.

It is reported that the Grand Trunk Railway will apply for a *mandamus*, to prevent the Southeastern from building a line from St. Lamberts to Dundee.

On Saturday there was a general depression

in Toronto bank stocks. The conditions for raising values of this kind of securities have not changed yet, and the consequence was a weak market.

## CROPS.

Generally speaking the wheat crop throughout Canada is good. There has been a very large crop of oats and their quality is good. Of rye and peas the crop is an average one.

## CHEAP GAS.

Montreal is again agitated over the price of gas, and the citizens are urging for cheap gas with some prospect success, as an offer has been made by some party who is prepared to contract to supply the city—to supply twenty-one-candle gas at this price. The City Council have been petitioned to make inquiry into the cost of gas production, and everybody and his wife signing it. If gas can be supplied at \$1 per thousand, it will be a saving of \$160,000 to the people of Montreal.

In reference to the duck and canvas seizures made of M. McKenzie & Co., ship-chandlers, Montreal, who have been importing these goods under a duty of five per cent—the correct amount, provided the goods were used as sails, but it seems they were used for other purposes and now M. McKenzie & Co. will have to pay the difference of duty between five per cent and twenty or forty per cent, on all these goods they have imported during the past three years. A penalty is also imposed upon them.

Labor is scarce in Montreal. Laboring men are receiving \$1.50 to \$1.75 per day, domestic servants from \$8 to \$12 per month, and cooks \$16 per month.

The Toronto and Ottawa Railroad are laying rails at Madoc.

Thursday last the townships of Elgin and Godmanchester and Huntington County Village voted bonuses to the Montreal and Chambly Junction Railway.

The Montreal Abattoir Company will lease their property, as it is conceded that it can be worked more profitably in that way.

The Southeastern Railroad has purchased the charter of the St. Johns and Chambly Railroad, and will have the line in running order about next June.

## CANADIAN WINTER PORT.

It is admitted that St. John and New Brunswick will be the winter port of the Dominion, with a splendid harbor where vessels can always procure a return cargo. It is the entrepot of a great lumbering country, and when the International, which will be the shortest and most direct route from Montreal, is completed it will be without a rival as a Canadian winter port.

OTTAWA, November 2, 1882.

THE Tanite Company, Stroudsburg, Pa., has just added another new building to its extensive emery-wheel works, 24x40 feet, two stories and an attic. Within the last sixteen months, by the erection of one building after another, as necessity required, the company has doubled its capacity. The goods manufactured by this firm are meeting with a constantly increasing demand.

"A RED flag is a danger-signal," said old Uncle Zadkins; "I know it is, for I found it out by waving a red flag at a bull."

### Cost of Carrying Coal on English Railways.

It is stated in the *Engineer* that a coal train of 300 tons, to run 100 miles, may be estimated for cost of running by the following method: The train would consist of thirty trucks, a brake van, and the engine and tender. The value of the rolling-stock is thus made up: Engine and tender, £2,300; thirty trucks, at £70, £2,100; brake van, £120; total, £4,520. Interest and wear and tear are taken at 20 per cent—say, in round numbers, £900 a year. The average year's running would be 15,000 miles. It might be much more, and probably would seldom be less; but this is taken as a fair mean, though somewhat underestimated, so as to be on the safe side. The cost for interest on capital and wear and tear for running such a train 100 miles will be £6. The engine would burn about 50 pounds of coal per mile, representing a cost of something like 16s. per 100 miles for fuel. Wages of stoker, driver, and guard for the trip would come to about as much. The total cost of haulage of the 300 tons of coal per 100 miles is thus shown—with an addition of 8s. for grease, oil, water, and sundries—to amount to the round figure of £8, or 6s. 4d. per ton per 100 miles. To this must be added the charges relating to permanent way, working expenses at stations, rent, rates, and taxes, and other miscellaneous charges. The *Engineer* does not believe that these expenses will amount to three times the haulage; but even if they do, it is evident that the railway companies ought to be able to carry coal profitably for about 2s. per ton per 100 miles. It is equally certain that the railway charges for coal carriage are much more than this average, since the Great Western Railway rate from Wales to Paddington is 8s. 5d. per ton in fully loaded trucks; and the rate from the Barnsley district to London, by the Midland and Great Northern railways, is 8s. 3d. per ton.

THE cable between Callao and Molendo being repaired, communication by telegraph is now open direct between Valparaiso and points in the United States and all intermediate stations on the west coast of South America. The opening of these lines, connecting with the Central and South American Telegraph Company's system at Lima, will be a saving of some fifteen hours in time between Valparaiso, the United States and Europe, as compared with the old route via Pernambuco and Lisbon.

THE iron bridge over the Savannah River was completed on the 30th ult., and the connections finished. Trains bound north on the Charleston and Savannah line passed over safely and the bridge will now be generally used. The bridge is a magnificent structure. It is substantial, and is considered the finest iron bridge in the South. It cost \$100,000.

A PECULIARITY of the Wilmington, Wrightsville, and Onslow Coast Railroad Company in North Carolina is that it is owned by colored men, and will be operated exclusively by them. E. F. Martin, an enterprising colored man of Wilmington, is the manager.

### Toledo, Cincinnati and St. Louis Railway.

R. M. POMEROY, president of the Toledo, Cincinnati and St. Louis Railway Co., having been interviewed, is reported to have said that the company has secured something like 113 acres of land on the river's edge at East St. Louis, and depots, warehouses, etc. will be immediately erected. The president settled the question of the road coming across the river by saying that the expense incurred by laying tracks on the bridge would never allow such a move; that the transfer of freight can be made much cheaper by ferry; and that such a plan has not been considered at all. The probability is that in time the company's shops will be built over the river, and the proper arrangements for transfer of freight and passengers made. The president is of the opinion that narrow-gauge railroads are growing in favor, and will continue to do so. His reason therefor being three-fold; in the first place, the cost of building and equipping a narrow gauge is but a moiety of that incurred in building a standard gauge, the running expenses are much lighter, and the result gained is almost as great. A narrow gauge car has capacity of fifteen tons, their thirty-ton engine will haul as many cars as desirable, etc. The narrow gauge for trunk line business will never gain favor, neither is it probable that standard gauges will ever be changed to narrow gauge, but for local business, such as the Toledo, Cincinnati and St. Louis is now seeking, principally, the advantages are all immensely in favor of narrow gauge. The company now owns about 850 miles of railroad, and has secured terminal facilities in three very important through points, Cincinnati, Toledo and St. Louis. Its lines tap the most fertile coal and iron fields of Ohio, and in that point are almost invulnerable to damaging competition. An able auxiliary to the narrow-gauge trunk line will be the Toledo, Texas and Rio Grande Railway, which connects with the Toledo, Cincinnati and St. Louis at a point in Edgar county, Illinois, thence running to Cairo and connecting with the Paramore system of Texas and the Palmer-Sullivan line at Eagle Pass for the City of Mexico.

### Marietta and Cincinnati Railroad.

IN view of the recent settlement of the foreclosure case of the Marietta and Cincinnati Railroad Company by the Ross County Court of Common Pleas at Chillicothe, Ohio, the following synopsis of the plan of reorganization prepared by John A. Hambleton & Co., of Baltimore, Md., will be read with interest. The plan of reorganization provides for the consolidation of the Marietta and Cincinnati, Cincinnati and Baltimore and Baltimore Short Line, the reorganized company assuming the bonds of the two last named, amounting to \$1,250,000. The bonds of the new or consolidated company will consist of—

*First*—First mortgage bonds, having fifty years to run, from November 1, 1881, with interest at the rate of 4½ per cent per annum, payable semi-annually, on the first days of May and November in each year—the coupon for

the first six months shall be payable on September 1, 1882:

For the principal of the first mortgage bonds of the M. and C. RR. Company..... \$3,500,000  
For the face of the coupons thereon to the 1st of November, 1881, and scrip..... 1,046,000  
For the stock of the Baltimore Short-Line Railroad Company at par, together with past due rentals thereon, prior to July 1, 1877, \$139,000 1,389,000  
The payment of the principal and interest of the above bonds will be guaranteed by the Baltimore and Ohio Railroad Company.  
For the stock of the Cincinnati and Baltimore Railway Company at par the bonds issued therefor will bear interest at 6 per cent per annum, payable semi-annually, from the same date as the other bonds issued under this mortgage..... 1,250,000

Total first mortgage bonds..... \$7,185,000

*Second*—Second mortgage bonds having fifty years to run, from November 1, 1881, with interest therefrom at the rate of 5 per cent per annum, payable semi-annually, on the first days of January and July in each year—the first coupon will cover interest from November 1, 1881, to July 1, 1882, and will be payable on October 1, 1882:

For the principal of the second mortgage bonds of the M. and C. RR. Co..... \$2,500,000  
For two-thirds of the face of the coupons on same to November 1, 1881, amounting to... 540,000

Total second mortgage bonds..... \$3,040,000

*Third*—Third mortgage bonds, having fifty years to run, from November 1, 1881, with interest at the rate of 3 per cent per annum for the first ten years and 4 per cent per annum thereafter to the maturity thereof, payable semi-annually, on the first days of February and August in each year—the first coupon will cover interest from November 1, 1881, to August 1, 1882, and will be payable on November 1, 1882:

For one-third of the face of the coupons on the second mortgage bonds of the M. and C. RR. Co. to November 1, 1881, amounting to..... \$270,000  
For two-thirds of the principal of the third mortgage bonds of the M. and C. RR. Co.... 2,000,000

Total third mortgage bonds..... \$2,270,000

*Fourth*—First income mortgage bonds, having fifty years to run, from November 1, 1881, with interest thereon, at a rate not exceeding 5 per cent per annum; non-cumulative; payable, if earned, from its net earnings realized after paying the expenses incurred in maintaining and operating its railway and equipment and the prior fixed charges thereon:

For one-third of the principal of the third mortgage bonds of the M. and C. RR. Co.... \$1,000,000  
For the face of the coupons thereon to November 1, 1881..... 1,910,000  
For amount of assessment to be paid on the capital stock of the M. and C. RR. Co., estimated at..... 500,000

Total first income mortgage bonds..... \$3,410,000

*Fifth*—Second income mortgage bonds, having fifty years to run, from November 1, 1881, with interest thereon, at a rate not exceeding 5 per cent per annum; non-cumulative; payable, if earned, from its net earnings realized after paying the expenses incurred in maintaining and operating its railway and equipment and the prior fixed charges thereon:

For the principal of the fourth mortgage bonds of the M. and C. RR. Co..... \$4,000,000  
Total second income mortgage bonds... \$4,000,000

AN important change in time has been made lately on the Burlington and Missouri River Railroad. The train from Kansas City and Atchison to Denver, now leaves in the morning instead of in the evening as heretofore, and from Denver to Atchison and Kansas City, in the afternoon, instead of the morning, as heretofore.

## THE STOCK EXCHANGES AND MONEY MARKET.

## New York Stock Exchange.

Closing Prices for the week ending Nov. 1.

Th. 26. F. 27. Sat. 28. M. 30. Tu. 31. W. 1.

Adams Express.	140%	139%	139%	139%	139%	139%
Albany and Susq.						
1st mortgage.	104%	104%	104%	104%	104%	104%
ad mortgage.	104%	104%	104%	104%	104%	104%
American Express.	92%	92%	93%	93%	93%	92%
Burl. C. R. & Nor.						
1st mortgage.	101%	101%	101%	101%	101%	101%
Canada Southern.	70%	70%	70%	69%	69%	69%
1st mortgage guar.	94	95	95	94	94%	94%
Central of N. Jersey.	73%	73	71%	71%	71%	71%
1st mort. 1890.			116%			
7s, consol. ass.	109					
7s, convertible ass.	109		85			
7s, Income.	85		85			
Adjustment.			108			
Central Pacific.	91	91%	90%	90%	90%	90%
6s, gold.	114%					
1st M. (San Joaq.)						
1st M. (Cal. & Or.)						
Land grant 6s.			104%			
Chesapeake & Ohio.	25%		25%	24%	25%	25%
1st pref.	38		37%	36%	37%	37%
ad pref.	26%		25%	25%	27%	27%
1st mort. series B	83%	90	90	89%	89%	89%
Chicago and Alton.			141%	141		142
Preferred.						
1st mortgage.						
Sinking Fund.			116%			
Chi. Bur. & Quincy.	133%	132%	132%	131%	132	132%
7s, Consol. 1903.			128			
Chi. Mil. & St. Paul.	110%	110	109%	109%	109%	109%
Preferred.	128%	126%	126%	126%	127%	127%
1st mortgage, 8s.			135			
ad mort. 7 3-108.			125			
7s, gold.			127%			
1st M. (La. C. div.)						
1st M. (I. & M. div.)			126			
1st M. (I. & D. ext.)						
1st M. (H. & D. div.)						
1st M. (O. & M. div.)						
Consolidated S. F.						
Chi. & Northwestern.	146%	145%	144%	144%	144%	144%
Preferred.	164%	163%	163	162	163%	161%
1st mortgage.	107%			105%		
Sinking Fund 6s.						
Consolidated 7s.			134%			
Consol. Gold b'ds	127%	128%		127		
Do. reg.						
Chi. R. Irl. & Pac.	133	132	131%	131%	131%	131%
6s, 1917, c.			129			
Clev. Col. Cin. & Ind.	86	84%	85			120%
1st mortgage.	120%					
Clev. & Pittsburg gr.				139%		
7s, Consolidated.						
4th mortgage.						
Oil. Chi. & Ind. Cent.	9%	9%		9%		
1st mortgage.						
ad mortgage.						
Del. & Hud Canal.	114	113%	113%	113%	113%	113%
Reg. 7s, 1891.						
Reg. 7s, 1884.			105%			
7s, 1894.						
Del. Lack. & Western.	138%	137%	136%	135%	136	136
ad mortgage 7s.						
Consol. 1907.						
Erie Railroad.						
1st mortgage.						
ad mort. 5s, ext.			108%			
3d mortgage.	101%		101%			
4th mort. 5s, ext.						
5th mortgage.						
7s, Consol. gold.			126			
Great West. 1st mort.						
ad mortgage.			102%			
Hannibal & St. Jo.						
Preferred.			82			
8s, Convertible.			82	81		
Houston & Tex. Cen.	82	81				
1st mortgage.	110%	110%				
ad mortgage.						
Illinois Central.	148%	148	147	147%	148%	148%
LakeShore & Mich. So.	133%	115%	115%	115%	115%	115
Consol. 7s.						
Consol. 7s, reg.						
ad Consolidated.	124		123%			
Leh. & W. B. con. ass.						
Long Dock bonds.						
Louisville & Nash.	55%	54%	50%	51%	51%	51
7s, Consolidated.	115%	115%		115%	115%	115%
Manhattan.	48	48	45		47	
1st pref.			88			
Met. Elevated.						
1st mortgage.	99	98%		98%	98%	
Michigan Central.	108%	103	102%	101%	101%	
7s, 1908.			127%	127%		
Morris & Essex.	124%		125		125	
1st mortgage.						
ad mortgage.						
ad mortgage.						
7s of 1871.			121			
7s, Convertible.						
7s, Consolidated.						
N. Y. Gen. & Hud. R.	133%	134%	134	133	132%	131%
6s, S. F. 1883.			102%		102%	100%
6s, S. F., 1887.			109			
1st mortgage.				133		
1st mortgage, reg.					133	
N. Y. Elevated.						
1st mortgage.	115%	115%				
N. Y. & Harlem.						
Preferred.						
1st mortgage.						
1st mortgage, reg.						
N. Y. Lake Erie & W.	42	41%	40%	40%	40%	40%
Preferred.	86%	86%	85%	85%	85	84%
ad Consolidated.	99%	100	98%	99%	99%	99%
New ad 5s fund.						
N. Y. N. Hav'n & Hart.			184	184		
North Mo. 1st mort.						
Northern Pacific.	46%	46%	45%	45%	45%	45%
Preferred.	93%	93%	92%	92%	92%	92%
Ohio & Mississippi.	38%	37%	36%	36%	35%	35%
Preferred.						
ad mortgage.					120%	
Consolidated 7s.						
Consol. S. Fund.					116%	
Pacific Mail S. Co.	39%	39%	39%	39%	39%	
Pacific R. R. of Mo.			106		106	105
1st mortgage.						
ad mortgage.						
Panama.						
Phila. & Reading.	61%	61%	61%	60%	60%	59
Pitts. Ft. W. & Chi. gtd.				138		
1st mortgage.					136%	
ad mortgage.						
3d mortgage.						
Pullman Palace Car.	128%	129%	128%	128%	128%	
Quicksell'r Min'g Co.				10		
Preferred.	41%					
St. Louis & San Fran.			38			37%
Preferred.	58	57				
1st Preferred.		98				
St. L. Alt'n & T. H.	46	44%				
Preferred.	86	85%		83		
1st mortgage.						
ad mort. pref.						
Income bonds.						
St. L. Iron Mt. & S.						
1st mortgage.					115	
ad mortgage.						105%
Toledo and Wabash.						
1st mortgage.						
ad mortgage.						
7s, Consolidated.				101		
St. Louis Division.	102%					
Union Pacific.	107%	107%	106%	106%	107	106%
1st mortgage.	115%	115%			116	
Land Grant 7s.						
Sinking Fund 8s.			117%		117%	
United States Ex.	68	68	69	69		
Wabash, St. L. & Pac.	33	32%	32	31%	32	31%
Preferred.	59%	58%	57%	57%	57%	57%
New mort. 7s.						
Wells-Fargo Ex.		130%			130%	
Western Pacific b'ds.			113			
Western Union Tel.	88%	88	87%	86%	86%	86%
7s, S.F conv., 1900.						
FEDERAL STOCKS:						
U. S. 4s, 1907, reg.					119%	119%
U. S. 4s, 1907, coup.						119%
U. S. 4 1/2s, 1891, reg.						112%
U. S. 4 1/2s, 1891, coup.				113%		
U. S. 5s, cont'd at 3%						
U. S. 5s, reg.						
Dt. of Col. 3-65s, reg.						108
Dt. of Col. 3-65s, coup.						
Northern Central.	57%	57%	57%	57%	57%	57
5s.	97%	97%				98
Northern Pacific.	45%	46%	46%	45%	45%	45%
Preferred.	93	93%	93%	92%	92%	92%
Pennsylvania R. R.	64%	64%	64%	63%	63%	63%
1st mortgage.						
Gen'l mort.						
Gen'l mort. reg.						
Consol. mort. 6s.						
Consol. mort. reg.						
1st mort. 6s, reg.						
Gen'l mort. 6s, reg.						
Def. Income bonds.						
Philadelphia & Erie.						
1st mortgage 5s.					103	
ad mortgage 7s.						
Pittsab. Cin. & St. L. 7s.						
Pitts. Tit. & Buff. 7s.						
Schuykill Navi't'n.						
Preferred.						
6s, 1895.						
6s, 1907.						
United Co. of N. J.	190				190	
Hestonville, (Horse).						
Oehstrn & Walnut.						

Fitchburg.	131			
N. Y. & New England.	52%	52%	52%	52
7s.	116%	116%	116%	116%
Northern N. H.				
Norwich & Worcester.				
Ogden & Lake Cham.				
Old Colony.	137	136	135%	135%
Ph., Wil. & Balt. (\$50).				
Portl'd, Saco & Portl.	112%			
Pueblo & Ark Val 7s.	114		114%	114
Pullman Palace Car.	129%		130	
Union Pacific.	108%	108	107%	107%
6s.	113%			
Land Grant 7s.				
Sinking Fund 8s.				116
Vermont & Mass.				
Worcester & Nashua.				
Cambridge (Horse).	102			
Metropolitan (Horse).				
Middlesex (Horse).				
Cal. & Hecla Min'g Co.	24%			
Quincy.	69%	69%	69%	68%
67%				

## Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 31.  
W.25.Th.26.F.27.Sat.28.M.30.Tu.31.

Baltimore & Ohio.....	193
6s, 1885.....	104 1/4 104 1/4
Central Ohio (\$50).....	108 1/4
1st mortgage.....	
Marietta & Cincin'ti.....	
1st mortgage, 7s.....	
2d mortgage, 7s.....	101 1/4 101 1/4 101 1/4
3d mortgage, 8s.....	101 1/4
Northern Can. (\$50).....	57 1/2 57 1/2 57 1/2 57 1/2 57 1/2
2d mort. 6s, 1885.....	116
3d mort. 6s, 1900.....	
6s, 1900, gold.....	
6s, 1904, gold.....	
Pitts. & Connells. 7s.....	121 1/4
Virginia & Consol. 56 1/2 56 1/2 56 1/2 56 1/2 56 1/2 59	
Consol. coupons.....	58 60
10-40 bonds.....	42 1/2 42 1/2
Def'd Certificates.....	
New 3s.....	50
Western Maryland.....	16 1/2 16 1/2 16 1/2
1st M. end. by Balt.....	169
2d M. do.....	
3d M. do.....	
1st M. unendorsed.....	
2d M. end. Wash Co.....	
2d M. preferred.....	
City Passenger R. R. ....	43

## London Stock Exchange.

Closing Prices

	Oct. 20.	Oct. 21.
Baltimore and Ohio 5s, 1927.....	108	110
Central of N. J. \$100 shares.....	80	85
Do. consol. mort.....	109	111
Do. Income Bonds.....	87	90
Central Pacific of Cal. \$100 sha. 93	94	93 1/4
Do. 1st mort. 6s, 1875-98.....	117	119
Det. G'd Haven & Mil. Equip. bds. 116	118	115
Do. Con. M. 5p.c. till '83 after 5p.c. 113	115	113
Illinois Central \$100 shares.....	152 1/2	153 1/2
Do. S. F. 5s, 1903.....	106	104
Lehigh Valley Cons. mort. 1923.....	115	119
Louisville and Nashville mort. 6s 93	95	93
Do. capital stock \$100 shares.....	56 1/2	57 1/2
N. Y. Cen. & Hud. R. mort. bonds. 132	136	132
Do. \$100 shares.....	136	137
Do. mort. bonds (stg.).....	121	123
N. Y. Lake Erie & West. \$100 sha. 43 1/4	43 1/4	43 1/4
Do. 6 p. c. pref. \$100 shares.....	88	90
Do. 1st Con. Mort. bonds (Erie) 127	130	127
Do. Funded Coupon bonds. 124	127	124
Do. ad Consol. Mort. bonds.....	102	104
Do. Funded Coupon bonds. 99	101	99
N. Y. Pa. & Ohio 1st mort. bonds. 59	60	59 1/2
Do. Prior Lien bonds (sterling) 100	105	100
Pennsylvania \$50 shares.....	65 1/2	66 1/4
General Mortgage.....	121	123
Phil. & Erie Gen. mort. 6s, 1920-1921.....	119	117
Philadelphia & Reading \$50 sha. 31 1/2	32 1/2	33 1/2
General Consol Mortgage.....	116	118
Do. Improvement Mortgage.....	102	104
Do. Gen. Mtg. '74, ex-def'd coup. 97	99	97
St. L. Bridge 1st mort. gold bond. 120	122	120
Do. 1st. pref. stock.....	94	96
S. P'tic of Cal. 1st mort. 6s, 1905-6. 106	108	106
Union Pacific 1st mtg. 6s, 1896-9. 118	120	118
Wabash, St. L. & P. \$100 shares..	33	35
Do. \$100 pref. shares.....	62	64
Do. gen. mort. bonds.....	86	83

## AMERICAN RAILROAD JOURNAL.

## Financial and Commercial Review.

THURSDAY EVENING, November 2, 1881.

THE rate for call loans on stocks in the forenoon was 6@7 per cent, and on United States bonds 4@5 per cent. In the afternoon the quotation was 8 per cent, and during the last hour 7@8 per cent.

The posted rates for prime bankers' sterling were 4, 8 1/4@4.85%. The actual rates were 4.80%@4.81 and 4.84%@4.85, with cables 4.85%@4.86, and prime commercial bills 4.79%@4%. The actual rates for Continental bills are as follows: Francs, 5.23% and 5.19%; Marks 94%@4% and 95%@4%; and Guilders, 39%@4% and 39 1/2@4%.

The public debt statement issued on the 1st inst. shows that the bonds at 6 per cent continued at 3 1/2 per cent have all been retired, and that the bonds at 5 per cent continued at 3 1/2 per cent have been reduced to \$155,356,350; the bonds at 4 1/2 per cent amount to \$250,000,000, the bonds at 4 per cent to \$738,929,600, and the bonds at 3 per cent to \$259,370,500; the refunding certificates stand at \$423,750, and the Navy Pension Fund at \$14,000,000—making the total interest-bearing debt \$1,418,080,200. The debt on which interest has ceased since 1st inst. is \$1,588,945.26, and the debt bearing no interest

is \$463,679,731.77. The accrued interest to date on the above indebtedness amounts to \$10,528,365.20—making the total debt, principal and interest, \$1,603,877,242.23. The total cash in the Treasury is \$275,386,199.05—leaving the debt, less cash in the Treasury, November 1, 1882, \$1,628,491,042.58, against \$1,644,120,223.13 on the 1st of October, a decrease in debt during the month of \$15,629,180.55, and since June 30, 1882, of \$60,423,418.14. The cash balance available, after providing for current liabilities, is \$151,145,237.13. The old demand and legal tender notes outstanding amount to \$346,740,396, certificates of deposit \$9,945,000, gold and silver certificates \$99,968,150, fractional currency \$7,026,185.77. The payments made from the Treasury by warrants during the month of October, 1882, were as follows: On account of civil and miscellaneous, \$5,647,490.11; war, \$5,279,501.73; navy, \$1,735,714.41; interior, Indians, \$654,466.74; interior, pensions, \$13,500.00; total, \$12,330,673.89. The above does not include payment made on account of the interest or principal of the public debt of the United States.

The New York, Lake Erie and Western Railroad Company, in deference to a growing desire on the part of its local patrons for a lower rate of fare for those who have occasion to travel frequently for purposes of business, visiting or pleasure, has placed on sale at its principal stations, from November 1, 1882, "1,000-mile tickets," at a rate of two cents per mile—a very liberal reduction in favor of the public from its legal rates, which, according to the laws of New York, New Jersey and Pennsylvania, are from 3 to 3 1/2 cents per mile. Ordinarily these tickets are only available for use by the individual to whom issued and whose name appears on the face of the ticket; but in the case of the head of a family purchasing a mileage book, the book may also be used by members of the family, so that if the wife and daughters want to "go shopping or visiting," they can use the book as a family pass, the conductors detaching coupons corresponding with the number of persons traveling together and the distance traveled. In similar manner, if a mileage book is purchased by a business house or firm, it may be used by any member or representative thereof traveling at its expense, but not by more than one at a time. They may be used by lawyers going to and from county seats and courts, by physicians, the clergy, by contractors, by all for summer pleasure, and in many ways they will enter into the economies, pleasures and business of our people. The Erie Company has also allowed a very liberal time within which purchasers of the mileage books may use them up—a whole year from the date of purchase! The 1,000-mile ticket of the Erie would appear to be the embodiment of the idea of "cheap transportation" of passengers, and it would not be surprising if the public manifested its appreciation of the Erie Company's liberality in a prompt and tangible way. The members of every household and business establishment from end to end of the road will now be able to travel more and for less money than ever heretofore.

The following is an official statement of the interest-bearing debt of the Texas and Pacific Railway, reaching from New Orleans to El Paso: Eastern Division, 537 miles (\$25,000 per mile on 524 miles, 13 miles not bonded), \$13,100,000; Rio Grande Division, 521.3 miles, at \$25,000 per mile, \$13,028,000; New Orleans Division, 336 miles, at \$20,000 per mile, \$6,720,000—total mileage, 1,394.3—total cumulative interest debt, \$32,848,000, upon which the interest charge per annum is \$1,970,880, equal to \$1,407 per mile. The Income and Land Grant bonds amount to \$8,784,000, the interest on which is paid by sales of land or in land scrip receivable for land. These bonds are a first mortgage on 4,600,000 acres of land lying along the road. The lands are now being bought up at the valuation of \$2 to \$3 per acre. At the present land valuations they will bring \$15,000,000. The price will soon be advanced, and the net receipts to the company for these lands alone is estimated at upwards of \$20,000,000. On the line from Fort Worth to El Paso there is due from the State over 5,000,000 acres of land which have not yet been selected.

The earnings of the Denver and Rio Grande Railway for the month of September, 1882, were \$599,191.36, the operating expenses (53.19 per cent) \$318,622.52, and the net earnings \$280,568.84, against \$208,531.65 for the month of September, 1881—an increase of \$72,037.19, or 35 per cent. The increase in mileage was 23 per cent.

The gross earnings of the West Jersey Railroad for September were \$105,582, an increase of \$2,652 as com-

pared with the same month of last year. The operating expenses were \$69,979, an increase of \$7,821. The net earnings were \$35,603, a decrease of \$10,473 as compared with September of last year. The net earnings over all expenses, including all bonded obligations, for the nine months ending September 30 were \$177,454, an increase of \$37,100 over the same period of 1881.

At a meeting of the board of directors of the Pennsylvania Railroad Company, held in Philadelphia on the 1st inst., the following resolution was adopted:

*Resolved*, That the president and board of directors do hereby declare a semi-annual dividend of 4 1/2 per cent upon the capital stock of the company out of the profits, and payable, clear of State taxes, on and after Nov. 29, 1882, to the shareholders as they stood registered on the books of the company at 3 o'clock, P. M. Oct. 31, 1882, or to their legal representatives, of which amount 2 1/2 per cent shall be paid in cash and 2 per cent in scrip redeemable in cash upon its delivery or convertible into the capital stock of the company if presented in sum of \$50 previous to Feb. 1, 1883.

The exchange of 3 per cent bonds for 3 1/2 per cents was resumed at the Treasury Department in Washington on the 1st inst. The amount of 3 per cent bonds previously issued in exchange for 3 1/2 per cents was about \$259,000,000, leaving \$119,752,000 of uncalled 3 1/2 per cents outstanding exchangeable into 3s at the option of the holder.

The September returns on the Toluca Division, Mexican National Railway—City of Mexico to Toluca—show an average of 655 passengers daily, and earnings at the rate of \$5,725 per mile per year. September was the initial month for this division. The road was operated only 27 days—from 4th to 30th—and for passenger traffic only. It is not yet open for freight.

The United States Treasury Department at Washington has completed its statement of the amount appropriated at the last session of Congress in the general appropriation bill. The total is \$251,428,117—to which should be added the Geneva award, about \$10,000,000; Post Office expenditures, \$42,000,000; indefinite permanent appropriations, including sinking fund, \$126,000,000—total current liabilities during the fiscal year, \$429,428,117. The Geneva award is appropriated as a specific fund, and will not all be used this year; nevertheless, it is a charge against the Treasury, is set apart as a special fund, and cannot properly be counted in the Treasury. There is not much probability that the expenditures under the head of indefinite appropriations will be less than the \$126,000,000 estimated by the Treasury, so that the total current demand liabilities of the Government during the fiscal year 1883 subject to draft at any time by virtue of laws already passed is \$429,428,117.57, or in round numbers \$430,000,000. On the other side of the ledger is to be placed the \$400,000,000 of revenue, which is the estimate of the Secretary of the Treasury, and which will not be exceeded by any considerable sum. No one in the Treasury thinks that the receipts can exceed \$400,000,000, and of course the \$42,000,000 of shortal receipts above the deficiencies are to be added to the revenue, so that the total revenue of the Government for the fiscal year, according to the estimate, will be \$442,000,000. As the current demand liabilities are \$430,000,000, the real actual net surplus revenue of the United States for the current fiscal year, after setting apart in the Treasury the money appropriated for specific purposes and making allowance for the interest on the public debt, is in point of fact about \$12,000,000. A good many public men talk about a surplus revenue of \$100,000,000 and \$150,000,000, but when they do this they do not take into account the permanent indefinite appropriations, the sinking fund, or any of the special funds which have been appropriated from time to time and set apart, which are not properly to be counted as cash in the Treasury. It is the custom, however, to count all money expended for interest on public debt as surplus revenue.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

*New York*.—Allegheny Central, 15; Atlantic and Pacific, 1st, 97; Boston and New York Air Line pref., 79 1/2; Chicago and Eastern Illinois 1st, 100; Chicago, Burlington and Quincy 8s, 102 1/2; Cedar Rapids, Iowa Falls and Northern 1st, 106; Chicago, St. Paul, Minn. and Omaha, 48%; do. pref., 107 1/2; do. consol., 107 1/2; Columbus, Hocking Valley and Toledo, 67 1/2; Cedar Falls and Minnesota, 17; Central Iowa, 33; Chesapeake and Ohio 1st, series A, 104 1/2; do. cur. 6s, 55; Chicago, Milwaukee and St. Paul,

Southern Minn. div. 1st, 108%; Chicago and West Pacific div. 1st, 92%; Chicago and Northwestern S. F. 58, 99%; Chicago, St. Louis and New Orleans 58, 105; Denver and Rio Grande, 51%; do. 1st, 113%; do. consol., 92%; Danbury and Norwalk, 70; Denver, South Park and Pacific 1st, 102%; East Tennessee, Virginia and Georgia, 10%; do. pref., 18%; do. inc., 43; do. 58, 75; Evansville and Terre Haute, 8%; Elizabethtown, Lexington and Big Sandy 68, 95; Fort Wayne and Denver, 37; do. 1st, 73; Green Bay, Winona and St. Paul, 8%; Gulf, Colorado and Santa Fe, 1st, 107%; International and Great Northern 1st, 106%; Indiana, Bloomington and Western, 39%; do. 1st, 90; do. inc., 50; do. Eastern div. 1st, 95; Indianapolis, Decatur and Springfield, 20; Kansas Pacific 1st consol., 104; do. 68, 1895, 110; Keokuk and Des Moines 1st, 101%; Lafayette, Bloomington and Muncie 1st, 104; Louisville, New Albany and Chicago, 1st, 104; do. N. O. and Mobile 1st, 90; do. Evansville, Henderson and Nashville 1st, 100; Lake Erie and Western, 33%; do. inc., 48; Louisville and Nashville, genl. mort. 68, 87; do. Cecilian Branch 1st, 105; Mobile and Ohio 1st debent., 80; Manhattan Beach, 18%; Minneapolis and St. Louis, 30%; do. pref., 70%; Missouri, Kansas and Texas, 34%; do. genl. mort. 68, 85%; do. consol. 78, 106; Missouri Pacific, 105%; do. 1st consol., 102%; do. 3d, 113; Memphis and Charleston, 53; Manhattan Co., 47; Michigan Southern S. F., 108; Metropolitan Elevated 2d, 87; Milwaukee, Lake Shore and Western pref., 49%; do. 1st, 102; Michigan Central 58, 98; Michigan Southern S. F., 108%; Norfolk and Western, 16; do. pref., 92%; do. genl. mort., ex-int., 101; New York, Chicago and St. Louis, 15% do. pref., 35; do. 1st, 94; New York, Ontario and Western, 36%; Nashville, Chattanooga and St. Louis, 50%; New Orleans Pacific 1st, 84; Northern Pacific 1st, 104; Nashville, Chattanooga and St. Louis 1st, 114%; Ohio Central, 16; do. inc., 40; do. 1st, 94; Ohio Southern, 15; do. 1st, 83%; Oregon Railway and Nav., 152; Oregon Transcontinental, 86; Oregon Short Line, 33%; do. 68, 100; Pennsylvania Co. 4%, 98; Peoria, Decatur and Evansville, 1st, 104%; do. 1st, Evansville div., 98; Quincy and Toledo 1st, 103; Rochester and Pittsburgh, 22%; do. 1st, 104; do. inc., 46; Rensselaer and Saratoga, 14%; Richmond and Alleghany, 17%; do. 1st, 79; Richmond and Danville, 74; do. 1st, 96%; do. debent., 65%; do. 68, 96; Richmond, Danville and West Point, 36%; Rome, Watertown and Ogdensburg ext. 58, 68; St. L. Alton and Terre Haute div. bonds, 50; St. Paul and Sioux City 1st, 109%; St. Paul, Minn. and Man., 74%; do. 1st, 100; do. 2d, 109%; do. Dakotah Ext. 1st ex-int., 106%; St. Paul and Duluth, 34%; do. pref., 94; South Carolina 1st, 99; St. Louis and Iron Mt. Arkansas Branch 1st, 110; do. Cairo, Ark. and Texas 1st, 107; do. 58, 76; do. Cairo and Fulton 1st, 107%; South Pacific of Mo. 1st, 103%; Southern Pacific of Cal. 1st, 103%; St. Louis, Kansas City and Northern R. E. 78, 104%; do. Omaha div. 1st, 108; St. Louis and San Francisco, class C, 93; Toledo and Wabash Equip. bonds, 50; Texas and Pacific, 40; do. Rio Grande div. 1st, 80%; do. inc. L. G., 58%; Toledo, Delphos and Burlington, 12; do. inc., 20; do. 1st, 66; Utah Southern genl. mort. 78, 107; Union Pacific col. trust, 109; Wabash, St. Louis and Pacific, genl. mort. 68, 82; Havana div. 1st, 90; Georgia 78, gold, 114; Louisiana consol., 69%; Tennessee 68, old, 49; do. compromise, 58%; American Cable, 71; Mutual Union Tel., 25%; do. 68, ex-int., 74; Colorado Coal and Iron, 40; do. 68, 84; Maryland Coal, 20; Homestake Mining, 17%; Ontario, 36; Standard, 4%.

Boston.—Atlantic and Pacific, 68, 95; do. blocks, 105; Atchison, Topeka and Santa Fe 58, 87; Boston, Clinton, Fitchburg and New Bedford, 56; Boston Land, 6%; Boston Water Power, 3%; Burlington and Missouri River in Nebraska 68, non-exempt, 102; Chicago and West Michigan, 67; Chicago, Burlington and Quincy 48, old, 84%; do. 48, plain, 78; do. 48, 1921, 77; do. 48, Denver ext., 83%; Chicago, Milwaukee and St. Paul, Dubuque div. 68, 102; Connerton Valley, 4; do. pref., 6; do. 68, 44; Central of Iowa, 82%; Cheshire R. R., 60%; Connecticut and Passaic Rivers pref., 93; Flint and Pere Marquette, 21; do. pref., 98; Iowa Falls and Sioux City, 90; Kansas City, St. Joseph and Council Bluffs 78, 113%; Kansas City, Fort Scott and Gulf 78, 111; Little Rock and Ft. Smith, 50; do. 78, 107; Massachusetts Central, 5%; do. 68, 35; Marquette, Houghton and Ontonagon, 68; Mexican Central, 20; do. 78, 73; do. blocks No. 3, 95; New Mexico and Southern Pacific 78, 114; New York and New England 68, 105%; Ogdensburg and Lake Champlain consol. 68, 91%; Oregon Short Line sub., 113; do. 68, 99%; Rutland pref., 21; South Boston Horse R. R., 72; Sonora 78, 104%;

Summit Branch, 9; Toledo, Cincinnati and St. Louis, 5%; do. 68, 53; Toledo, Delphos and Burlington Branch inc., 12; do. Dayton div. 68, 56; do. Southeast div. 68, 53; Wisconsin Central, 16%; do. 78, 1st Series, 79; do. 2d Series, 43%; Allouez Mining Co., 2; Brunswick Antimony, 9; Franklin, 14; Huron, 2%; National, 1%; Napa Quicksilver, 4%; Osceola, 2%; Pewabic, 8%; Silver Islet, 11; Sullivan, 2.

Philadelphia.—Belvidere Delaware 1st, 121%; Central Transp., 34%; Cincinnati 7-308, 131%; Camden County 68, 1884, 102%; Henstonville Pass. R. R. 68, 108; Huntingdon and Broad Top Mt. consol. 58, 89%; Nesquehoning Valley, 54; Philadelphia and Reading Coal and Iron debent. 78, 60; Philadelphia, Germantown and Norristown, 109; Pennsylvania and New York Canal 78, 1906, 126%; Pennsylvania Co. 68, 107; Philadelphia City 68, 1895, 128; do. 68, 1903, 133%; do. 48, 1904, 113; Philadelphia and Reading R. R. debent. 68, 60; do. consol. gold 68, 114; do. scrip, 97; Pennsylvania R. R. consol. 58, 107; Philadelphia, Wilmington and Baltimore 48, 95; St. Paul and Duluth, 36; Texas and Pacific consol. mort. 68, 93%; do. 68, Rio Grande div., 8%; Union and Titusville 78, 95; Warren and Franklin 78, 112. The latest quotations are: City 68, 108@120; do. free of tax, 127@134; do. 48, new, 106@114; Pennsylvania State 58, new loan, 118%@118%; do. 48, old, 111@114; do. 48, new, 116@117; Philadelphia and Reading Railroad, 29%@29%; do. consol. mort. 78, reg., 126%@127; do. genl. mort. 68, coupon, 94@95; do. 78, 1893, 118@120; do. 78, new conv., 73@75; United New Jersey R. R. and Canal, 189%@190%; Buffalo, Pittsburgh and Western, 20%@20%; Pittsburgh, Titusville and Buffalo 78, 96@—; Camden and Amboy mort. 68, 1889, 115@115%; Pennsylvania R. R., 62@62%; do. general mort. 68, coupon, 124@126; do. reg., 125@—; do. consol. mort. 68, reg., 121%@122%; Little Schuylkill R. R., 58@58%; Schuylkill Navigation pref., 12@12%; do. 68, 1882, 89@90; Elmira and Williamsport pref., 58@60; do. 58, —@100; Lehigh Coal and Navigation, 41%@41%; do. 68, 1884, 103@103%; do. 58, 102%@103%; Minehill, 62%@63; Catawissa, 20@21; do. pref., 55@56; do. new pref., 53%@54%; do. 78, 1900, 118@120; Lehigh Valley, 63%@—; do. 68, coupon, 122@124; do. reg., 122@124; do. 78, 132@133; do. consol. mort., 122@123; Fifth and Sixth streets (horse), 190@—; Second and Third, 114@120; Thirteenth and Fifteenth, 78@80; Spruce and Pine, 42@44; Green and Coates, 90@—; Chestnut and Walnut, 90@93; German-town, 70@75; Union, 110@111; West Philadelphia, 115@120; People's, 11%@12%; Continental, 103@105.

Baltimore.—Atlanta and Charlotte 1st, 107%; Atlantic Coal, 110; Baltimore City 68, 1902, 130; do. 68, 1890, 115%; do. 68, 1886, 108; do. 58, 1894, 113%; do. 58, 1916, 122%; Baltimore and Ohio 1st pref., 128; do. 2d pref., 123; Canton 68, 104%; Charlotte, Columbia and Augusta, 43%; George's Creek Coal, 93; Maryland Defense 68, 104%; Marietta and Cincinnati 1st Trust certificates, 127%; do. 2d, 101%; do. 3d do., 57%; Northern Central 58, series A, 98; North Carolina 48, 75; Ohio and Mississippi, Springfield div. 1st, 116%; Parkersburg Branch, 8; St. Louis City 68, ster., 114; Virginia Midland 2d mort., 108; do. 5th mort., 93%; Virginia and Tennessee 88, 125; Virginia 10-40 coupons 68; do. Peeler, 35%; do. coupons, 39%; Wilmington, Columbia and Augusta, 107%; Wilmington and Weldon, 110. The latest quotations are: Atlanta and Charlotte 1st, 107%@107%; Baltimore and Ohio, 193@195; do. 68, 1885, 103%@104%; Canton 68, 104@—; Columbia and Greenville 1st, 100%@101%; Marietta and Cincinnati 1st, 127%@128%; do. 2d, 101%@101%; do. 3d, 57%@57%; Northern Central, 56@56%; do. 68, 1900, gold, 110@115%; do. 58, Series A, 97%@—; Norfolk Water 88, 132@135; Ohio and Mississippi, Springfield div. 1st, 115@117; Richmond and Danville 1890, 106@—; do. 1915, —@97; Virginia Midland 5th mort., 93%@94%; do. inc., 56%@60; Virginia consols, 59%@59%; do. 10-40s, 43%@43%; Western Maryland 2d pref., 108%@110.

#### THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT,  
NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND of TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER,  
Treasurer.

#### The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending Oct. 21, and for the year to the same date, compared with their respective amounts carried to the same time last year:

Week.	1882.	1881.
Reading Railroad	207,223	7,275,322
Schuylkill Canal	18,614	412,209
Lehigh Valley	137,986	5,473,629
Delaware, Lackawanna and Western	108,851	3,640,726
Shamokin	26,909	915,841
Central R. R. of New Jersey	105,874	3,509,762
United R. R. of New Jersey	42,071	1,370,541
Pennsylvania Coal	35,543	1,133,429
Delaware and Hudson Canal	89,929	2,808,653
Huntingdon and Broad Top Mountain	10,301	375,427
Penn. and New York	34,187	1,273,359
Clearfield, Pa.	55,496	2,287,802

The total tonnage of anthracite coal from all the regions for the week ending Oct. 21, as reported by the several carrying companies, amounted to 702,977 tons, against 631,688 tons in the corresponding week last year, an increase of 71,289 tons. The total amount of anthracite mined for the year is 22,904,317 tons, against 22,131,244 tons for the same period last year, an increase of 773,073 tons. The quantity of bituminous coal sent to market for the week amounted to 109,640 tons, against 108,409 tons in the corresponding week last year, an increase of 1,231 tons. The total amount of bituminous mined for the year is 3,473,182 tons, against 3,920,184 tons for the corresponding period last year, a decrease of 447,002 tons. The total tonnage of all kinds of coal for the week is 812,617 tons, against 740,097 tons in corresponding week last year, an increase of 72,520 tons, and the total tonnage for the coal year is 26,377,490 tons, against 26,051,428 tons to same date last year, an increase of 326,071 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Oct. 21 was 223,859 tons, of which 174,300 tons were coal and 49,559 tons coke. The total tonnage for the year thus far has been 8,846,880 tons, of which 6,507,078 tons were coal and 2,370,802 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Oct. 21 were 52,643 tons, and for the year to that date 1,008,004 tons, a decrease of 702,227 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 26,948 tons; year, 706,807 tons; decrease as compared with 1881, 388,615 tons. Chesapeake and Ohio Canal—Week, 20,729 tons; year, 164,052 tons; decrease as compared with 1881, 222,809 tons. Pennsylvania Railroad—Week, 4,440 tons; year, 130,797 tons, decrease from last year, 95,313 tons. The Reading Railroad shipment for last week, ending October 28, was about 201,000 tons, of which 50,300 tons were sent to and 41,800 tons shipped from Port Richmond, and 15,000 tons sent to and 14,300 tons shipped from Elizabethport.—*Philadelphia Ledger*, Oct. 30.

The Treasury Department has just decided that frogs' legs are not "fresh fish for immediate consumption." It appears that large quantities of frogs' legs are taken in Canada and shipped across the border for consumption in the United States. The treaty of Washington provided that fish should be taken across the line free of duty. The Treasury Department some time ago decided that frogs' legs were not fish, as provided for by this treaty, and the importers of the delicacy then sought to have the frogs' legs admitted free of duty under that line of the Tariff laws which places upon the free list "fresh fish for immediate consumption." Now the Department decides that frogs' legs are no more fish under the Tariff than they were under the Treaty.

The formal inauguration of the work on the Trent Valley Canal took place at Fenelon Falls, Canada, on the 27th ult. In the evening a banquet was given to Mr. Hector Cameron, M.P., in recognition of his services in connection with the undertaking.

**FOR SALE.**

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.  
 One Second-hand "Tank" Narrow-Gauge Engine, 10 tons. Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.  
 One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.  
 Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.  
 Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.  
 Cars—Passenger and Freight Cars of all descriptions for early delivery.  
 Rails—76lb., 80lb. 30lb. 35lb. and 56lb. Rails.  
 Car Wheels and Axles.  
 Narrow-Gauge Rolling-stock a specialty.

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**F. W. DEVOE & CO.**

Manufacturers of Fine

**RAILWAY VARNISHES,  
 COACH AND CAR COLORS,**

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Fine Brushes adapted for Railroad use. All kinds of Artists' Materials. Colors for ready use, and all specialties for Railroad and Carriage purposes.

Railroad companies will save themselves great trouble in painting by allowing F. W. DEVOE & Co. to prepare their Passenger and Freight Car Colors. This will insure Durability, Uniformity and Economy. F. W. DEVOE & Co., manufacture from the crude materials, which are the component parts of any shade, and they understand better their chemical relationship, when in combination, than can be possible to those who simply buy their dry materials and then grind them.

SEND FOR SAMPLE CARD OF TINTS.

**Cor. of Fulton and William Sts.  
 NEW YORK.**

**Continuous  
 Automatic  
 FREIGHT BRAKES.**

**Requiring no other Connection  
 between Cars than the or-  
 dinary Coupling-Link  
 and Pin.**

**SIMPLE, DURABLE, AND EFFICIENT.**

Brakes can be applied to every Car in the longest train, from the engine or caboose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

**PATENTED MAY 23, 1882.**

Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufacture and introduction, are invited to correspond with

**WM. C. SCHULTZE,  
 Surgeon C. R. I. and P. Ry.  
 MARENGO, Iowa Co., Iowa.**

**NO OTHER LINE IS SUPERIOR TO THE  
 FITCHBURG RAILROAD  
 HOOSAC TUNNEL ROUTE  
 WEST.**

**6.30 A. M. ACCOMMODATION.**

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, **DETROIT AND CHICAGO.**

**3.00 P. M. CINCINNATI  
 EXPRESS.**

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs via Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

**3.00 P. M. ST. LOUIS  
 EXPRESS.**

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

**BOSTON TO ST. LOUIS WITHOUT CHANGE!  
 ARRIVING AT 8.00 A.M. SECOND MORNING.**

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville, Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

**SOUTH WEST.**

**6.00 P. M. PACIFIC  
 EXPRESS.**

The only line running a through sleeping car via Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

**WEST AND NORTHWEST.**

**THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.**

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

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JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent,  
 In effect January 9th, 1883, and subject to change.

## RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*...100	2,500,000	semi-an	July '82 2	Little Miami.....50	4,637,300	q'arterly	Sept. '82 2	Ware River*.....100	750,000	semi-an	July '82 2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3 1/2	Little Rock & Ft. S.....100	4,006,135	.....	July '81 108	Warren (N. J.).....100	1,800,000	semi-an	Apl. '82 3 1/2
Atch., Top. and S. Feiro	54,000,000	q'arterly	Nov. '82 1 1/2	Little Schuylkill*...50	2,646,100	semi-an	July '82 1 1/2	Warwick Valley.....100	340,000	semi-an	July '82 2 1/2
Atlanta and W. Point*100	1,232,200	semi-an	Jan. '82 6	Long Island.....50	10,000,000	q'arterly	Nov. '82 1	Westchester & Phil. pref*100	821,300	semi-an	July '82 6 2
Atlantic and St. Law*100	5,840,000	semi-an	Mar. '82 3	Louisville & Nashv.....100	19,30,913	semi-an	Feb. '82 3	West Jersey.....100	1,359,750	semi-an	Sept. '82 3
Augusta and Savan*100	1,082,900	semi-an	June '82 3 1/2	Lowell & Andover.....100	500,000	semi-an	Jan. '82 3 1/2	Wilmington & Newb*100	1,456,200	semi-an	July '82 3
Avon, Genesee & Mt*100	225,000	semi-an	July '81 3	Lykens Valley.....100	600,000	q'arterly	Oct. '81 2 1/2	Wil., Col., & Aug.....100	900,000	semi-an	July '82 3
Baltimore and Ohio. 100	14,792,566	semi-an	Nov. '82 5	Manchester & Law.....100	1,000,000	semi-an	Nov. '82 5	Winchester & Poto*100	180,000	semi-an	July '82 3
" pref. 100	5,000,000	semi-an	July '82 3	Manhattan.....100	13,000,000	.....	.....	Winchester & Strasb*100	74,700	semi-an	July '82 3
Washington Br.....100	1,650,000	semi-an	Nov. '82 5	" 1st pref.100	6,500,000	q'arterly	Oct. '82 1 1/2	Worcester & Nashua. 75	1,789,800	semi-an	July '82 1 1/2
Berkshire*.....100	600,000	q'arterly	Apl. '82 1 1/2	" 2d pref.100	6,500,000	q'arterly	Oct. '82 1 1/2	HORSE-POWER R. R.			
Boston and Albany. 100	20,000,000	q'arterly	Sept. '82 2	Marietta & Cincinnati 50	1,286,350	.....	.....	Albany City.....100	200,000	annual	.... '80 5 1/2
Bos. & N. Y. Airline pf.100	2,795,227	q'arterly	June '82 1	Marq. Hout & Ont. pf.100	4,440,000	semi-an	Sept. '66 3 1/2	Baltimore City.....25	1,000,000	semi-an	Oct. '82 3
Bos., Cl. F. & N. B. pref.100	1,750,100	semi-an	Oct. '82 3 1/2	Massa*.....100	2,259,026	.....	Aug. '82 4	Balt., Cat. & El. Mills. 100	.....	semi-an	July '82 3
Bos., Conc. & Mont. pf*100	800,000	semi-an	Nov. '82 3	Metropolitan.....100	400,000	.....	Aug. '82 3	Bleeker St. & Ful. F'y. 100	900,000	semi-an	July '82 3
Boston and Lowell. 500	3,940,000	semi-an	July '82 2	Michigan Central.....100	18,728,204	q'arterly	Oct. '82 1 1/2	Boston & Chelsea pref. 50	110,000	semi-an	Oct. '82 3
Boston and Maine.....100	6,921,274	semi-an	Nov. '82 4	Middlesex Central.....100	280,000	semi-an	Aug. '82 3	Broadway (Brooklyn) 100	250,000	q'arterly	Oct. '82 6
Boston & Providence*4,000,000	4,000,000	semi-an	July '82 3 1/2	Mill Creek & Minehill*50	323,000	semi-an	July '82 3	B'way & 7th Av. (N. Y.) 100	2,100,000	q'arterly	Oct. '82 2
Attleborough Br.....100	131,700	semi-an	July '82 3 1/2	Mill Hill & Schuyl. H'v'y. 50	4,022,500	semi-an	Oct. '82 1 1/2	B'klyn & Hunter's Pt. 100	400,000	semi-an	Oct. '82 6
Bos., Revere & Lynn*100	419,400	semi-an	July '82 3 1/2	Missouri Pacific.....100	28,169,800	q'arterly	Oct. '82 1 1/2	Brooklyn City.....100	2,000,000	q'arterly	Aug. '82 3 1/2
Buffalo, N. Y. & Erie*100	950,000	semi-an	June '82 3	Mobile & Montgomery 100	3,022,500	semi-an	Feb. '82 1 1/2	Bushwick (Brooklyn) 100	300,000	semi-an	Oct. '82 6
Camden & Atlantic. 50	377,400	q'arterly	Nov. '82 3	Morris and Essex.....50	15,000,000	semi-an	July '82 3 1/2	Cambridge.....100	908,000	q'arterly	Oct. '82 4 1/2
" pref. 50	886,650	q'arterly	Nov. '82 4	Mt Carbon & PtCarbon 50	2,235,000	semi-an	July '82 6	Cen. Park, N. E. Riv. 100	1,800,000	q'arterly	Oct. '82 6
Camden & Burl. Co. 100	381,925	semi-an	July '82 3	Nashua and Lowell. 100	800,000	semi-an	Nov. '82 4	Christoph. & Tenth St. 100	650,000	semi-an	Aug. '82 2 1/2
Canada Southern.....100	15,000,000	.....	Feb. '82 2 1/2	Nashua & Rochester. 100	1,305,800	semi-an	Oct. '82 1 1/2	Citizens' (Phil.).....50	192,500	q'arterly	Jan. '82 2 1/2
Cape May & Millville*50	447,000	semi-an	June '82 3	Nashv. & Decatur. 100	1,827,000	semi-an	June '81 3	Citizens' (Pbg.).....50	200,000	annual	.... '80 14 1/2
Catawissa*.....50	1,159,500	annual	Oct. '81 8 1/2	Nashv., Chat. & St. Louis 25	6,670,325	semi-an	Apl. '82 1 1/2	Coney Island & Bklyn 100	500,000	semi-an	Oct. '80 5
" pref. 20	2,200,000	semi-an	Nov. '82 3 1/2	Naugatuck.....100	2,000,000	semi-an	July '82 5	Continental (Phil.).....50	580,000	semi-an	July '82 6
Cayuga and Susq*50	1,000,000	semi-an	Nov. '82 3 1/2	Nequechonning Val*50	1,300,000	semi-an	Sept. '82 3	D. Dock, E. B'way & Batico 1,200,000	q'arterly	Aug. '82 4	
Cedar Rapid & Mo. R*100	6,850,400	q'arterly	Nov. '82 1 1/2	N. Castle & Beaver Val*50	600,000	q'arterly	Oct. '81 1	Eighth Av. (N. Y.) 100	1,000,000	q'arterly	Oct. '82 3
" pref. 100	760,600	semi-an	Aug. '82 3 1/2	N. Y. Cen. & Hud. R. 100	89,428,330	q'arterly	Oct. '82 2	42d St. & G. St. Ferry 100	747,000	semi-an	May '82 6
Central of Georgia. 100	7,500,000	semi-an	June '82 4	N. Y. and Harlem.....100	7,950,000	q'arterly	July '82 4	Frankf. & Southw. (Ph) 50	600,000	q'arterly	Oct. '82 6
Central of New Jersey. 100	18,563,200	q'arterly	July '76 2 1/2	" 1st pref. 100	1,500,000	annual	Apl. '82 3	Germantown. (Ph) 50	572,800	q'arterly	Oct. '82 2 1/2
Central Ohio*50	2,437,950	semi-an	July '82 3	City Line.....100	7,000,000	.....	.....	Girard College (Ph) 50	500,000	semi-an	July '82 3
" pref. 50	411,550	semi-an	July '82 3	North Carolina*.....100	3,000,000	.....	.....	Grand St. & Newton 100	170,000	semi-an	July '81 2 1/2
Central Pacific.....100	59,275,500	semi-an	Aug. '82 3	" 2d pref. 100	1,000,000	semi-an	Sept. '82 3	Green & Coates (Ph) 50	150,000	q'arterly	Aug. '82 4
Chemung*.....100	380,000	q'arterly	July '81 1 1/2	" 3d pref. 100	8,156,825	.....	.....	Heston, Mantau & F'm 100	299,381	semi-an	Jan. '75 4
Cheshire preferred.....100	2,155,300	semi-an	July '82 1 1/2	" 4th pref. 100	15,000,000	semi-an	Jan. '82 5	Highland.....100	150,000	.....	Oct. '78 7
Chicago and Alton. 100	11,181,741	semi-an	Sept. '82 4	" 5th pref. 100	15,257,150	q'arterly	Aug. '82 1 1/2	Lomb. & South Sta. (Ph) 25	572,800	q'arterly	July '82 4
" pref. 100	2,245,400	semi-an	Sept. '82 2	" 6th pref. 100	6,142,000	semi-an	July '82 3	Lynn and Boston.....100	195,000	semi-an	Oct. '78 4
Chi., Burl. & Quincy*55,337,455	q'arterly	Oct. '82 3	" 7th pref. 100	3,068,400	semi-an	June '82 3	Malden and Melrose 100	165,000	.....	.... '82 4	
Chi., Iow. & Nebras. 100	3,916,200	semi-an	July '82 4	" 8th pref. 100	2,604,400	semi-an	July '82 5	Metropolitan (Bost.) 50	1,500,000	semi-an	July '82 4
Chi., Mil. & St. Paul. 100	20,404,461	semi-an	Oct. '82 3 1/2	" 9th pref. 100	4,030,000	semi-an	May '82 4	Middlesex (Boston) 100	650,000	semi-an	Nov. '82 3 1/2
Chi., N. Western*100	14,401,183	semi-an	Oct. '82 3 1/2	" 10th pref. 100	7,333,800	semi-an	July '82 3	N.Y., Bay Ridge & Jamico 100	150,000	.....	Oct. '78 7
Chi., R. I. & Pacific*100	21,325,335	semi-an	July '82 1 1/2	" 11th pref. 100	6,000,000	semi-an	July '82 3	Ninth Av. (N. Y.) 100	797,320	.....	.... '82 4
Chi., R. I. & West Mich. 60	41,960,000	q'arterly	Nov. '82 1 1/2	" 12th pref. 100	1,000,000	semi-an	July '82 3	Orange & Newark.....100	282,555	.....	.... '82 4
Chi., St. P. & M. & O. pref. 100	6,151,000	semi-an	Feb. '82 2 1/2	" 13th pref. 100	2,604,400	semi-an	Mar. '75 3 1/2	People's (Phil.) pref. 25	124,744	.....	July '82 2
Chi., Ind., St. L. & Chi. 100	10,390,000	q'arterly	Oct. '82 1 1/2	" 14th pref. 100	4,030,000	semi-an	July '82 3	Philadelphia City.....50	475,000	semi-an	July '82 4
Cin., Sand. & Clev. pf. 50	429,037	semi-an	July '82 1 1/2	" 15th pref. 100	7,333,800	semi-an	July '82 3	Phila. & Darby.....200,000	308,000	semi-an	Jan. '82 6
Clev. and Mahoning*50	37,759,200	semi-an	Nov. '82 3 1/2	" 16th pref. 100	6,000,000	semi-an	July '82 3	Pbg., Alleg. & Manches. 300,000	300,000	q'arterly	Oct. '81 3
Clev. and Pittsburg*50	11,244,336	q'arterly	Sept. '82 1 1/2	" 17th pref. 100	1,333,800	semi-an	July '82 3	Ridge Avenue (Ph) 50	420,000	semi-an	Jan. '81 1
Columbus & Xenia*50	1,786,200	q'arterly	Sept. '82 2	" 18th pref. 100	6,000,000	semi-an	July '82 3	Second Avenue (N. Y.) 100	1,199,500	semi-an	July '82 4
Colum. & Hocking Val*100	2,500,200	semi-an	Aug. '82 2 1/2	" 19th pref. 100	1,320,400	semi-an	Aug. '82 4 1/2	Second & Third St. (Ph) 50	771,076	.....	Jan. '82 4 1/2
Concord.....50	1,500,000	semi-an	Nov. '82 5	" 20th pref. 100	7,000,000	.....	.....	17th & 19th sts. (Ph) 50	250,000	semi-an	July '82 3
Concord and Ports*100	350,000	semi-an	July '82 3 1/2	" 21st pref. 100	2,300,000	semi-an	July '82 4	Sixth Avenue (N. Y.) 100	750,000	semi-an	May '82 5
Conn. & Passau*100	2,244,400	semi-an	Aug. '82 3	" 22nd pref. 100	2,488,000	semi-an	July '82 4	Somerville (Boston) 100	113,000	semi-an	Nov. '82 3
Connecticut River*100	2,100,000	semi-an	July '82 4	" 23rd pref. 100	3,421,50	semi-an	Jan. '82 5	South Boston.....50	600,000	semi-an	July '82 4
Cumberland Valley*50	1,292,950	q'arterly	Oct. '82 2 1/2	" 24th pref. 100	8,736,570	semi-an	Nov. '82 4 1/2	3rd Avenue, N. Y. 100	2,000,000	q'arterly	Aug. '82 5
" 1st pref. 50	241,000	semi-an	Apl. '82 2 1/2	" 25th pref. 100	30,000,000	semi-an	June '82 3	13th & 16th sts. Ph 50	334,520	q'arterly	Jan. '82 4
" 2d pref. 50	243,000	semi-an	Oct. '82 2 1/2	" 26th pref. 100	2,000,000	semi-an	July '82 3	23rd street, N. Y. 100	600,000	semi-an	Aug. '82 4
Danbury & Norwalk. 50	600,000	.....	.....	" 27th pref. 100	1,200,000	semi-an	Feb. '82 4	Union, Boston.....100	374,300	semi-an	Jan. '82 4
Dayton and Mich.*50	2,402,573	semi-an	.....	" 28th pref. 100	2,231,900	q'arterly	Jan. '75 4	Union, Phila.....50	1,005,000	semi-an	Jan. '82 7
" pref. 50	1,211,250	q'arterly	July '82 2	" 29th pref. 100	1,551,800	q'arterly	July '82 3 1/2	West Philadelphia.....50	750,000	.....	July '77 10
Delaware*25	1,648,940	semi-an	July '82 3	" 30th pref. 100	1,250,100	q'arterly	Oct. '82 2 1/2	CANALS.	2,078,038	semi-an	June '75 2
Del. & Bound Brook*100	1,652,000	q'arterly	Nov. '82 1 1/2	" 31st pref. 100	1,653,350	.....	.....	Delaware Division.....50	1,633,350	semi-an	Aug. '82 1
Del., Lack. & Western 50	26,200,000	q'arterly	Oct. '82 2	" 32nd pref. 100	20,000,000	q'arterly	Sept. '82 1 1/2	Delaware and Hudson 100	2,000,000	.....	.....
Denver & Rio Grande. 100	29,160,000	q'arterly	Jan. '82 1 1/2	" 33rd pref. 100	19,74,285	q'arterly	Oct. '82 1 1/2	Delaware & Raritan*100	5,847,400	q'arterly	Oct. '82 2 1/2
Den., South P. & Pac. 100	3,500,000	.....	Aug. '82 4	" 34th pref. 100	6,770,900	q'arterly	Oct. '82 1 1/2	Lehigh Coal & Nav 50	11,204,250	semi-an	June '82 2
Detroit,											

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Superior Elegance, Lightness and Durability. The result of 50 years' experience.

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Between New York, Great Barrington, Stockbridge, Lenox, and Pittsfield—the far-famed resort of the

### Berkshire Hills

of Western Massachusetts—the "Switzerland of America."

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H. D. AVERILL, Gen'l Ticket Agent.

W. H. YEOMANS, Superintendent.

General Offices Bridgeport Ct. May 1, 1881.

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The only Line running through cars between

BOSTON      Philadelphia, Baltimore and Washington, without change.

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**BOSTON and NEW YORK**

(via Hartford and New Haven).

Express train leaves Boston 9:00 A. M., arrives at New York 4:22 P. M. Returning leaves Grand Central Depot, New York, at 11:35 P. M., arrives at Boston 7:55 A. M.

\*This is the latest evening train leaving New York.

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—BETWEEN—

### BOSTON AND NEW YORK.

Steamboat train with Drawing-Room cars leaves Boston 7:00 P. M. arrives at New London at 10:15 P. M., connecting with the new steamer **CITY OF WORCESTER**, Monday, Wednesdays and Fridays, and **CITY OF NEW YORK**, Tuesdays, Thursdays and Saturdays. Returning, steamer leaves Pier 40, North River, New York, at 4:30 P. M., connecting at New London with train leaving at 4:15 A. M., arriving in Boston at 7:55 A. M. Good night's rest on the boat.

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Office 322 Washington st., Depot foot Summer st., Boston.  
S. M. FELTON, Jr.,  
Gen'l Manager.

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## NEW YORK, LAKE ERIE AND WESTERN RAILWAY

### TO THE TRAVELING PUBLIC.

During the Centennial season—six months closing September 10, 1876—the Erie Railway carried almost THREE MILLION passengers, without a single accident to life or limb, or the loss of a piece of baggage.

And for a whole year the official records of the United States Post Office Department show the arrivals of Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

Facts well worthy the consideration of travelers.

E. S. BOWEN, General Superintendent.

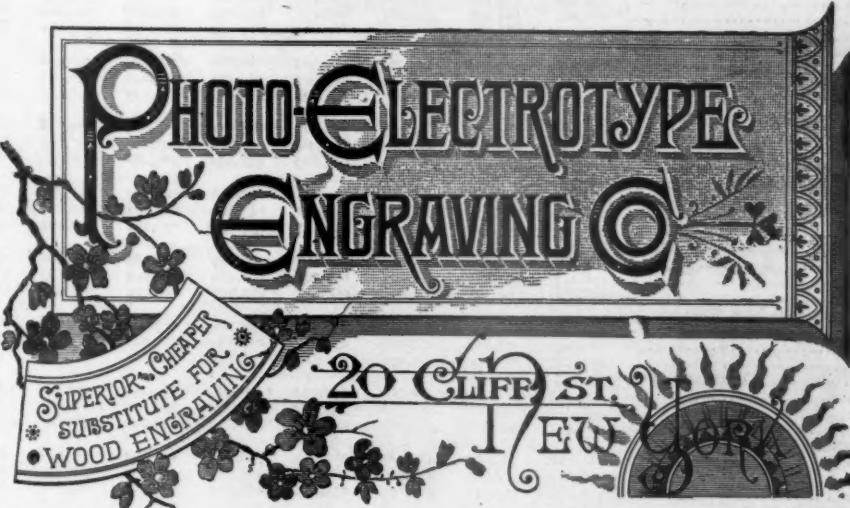
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RAILROAD IMPROVEMENTS & SUPPLIES.**

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Letters respecting the financial affairs of the Company should be addressed—

**H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.**

## RAILROAD EARNINGS—MONTHLY.

RAILROAD EARNINGS—MONTHLY.														Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
BURL. CEDAR RAP. & NORTHERN:														
1880.	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484	
1881.	167,750	124,510	148,551	184,080	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037	
1882.	252,823	225,031	224,107	178,304	199,278	211,257	198,376	224,921	201,439	201,439	201,439	201,439	201,439	
CENTRAL PACIFIC:														
1880.	1,200,615	1,070,487	1,373,438	1,356,488	1,778,488	1,724,930	1,840,480	1,973,438	1,994,907	1,120,229	2,199,466	1,905,221	20,508,113	
1881.	1,602,907	1,454,218	1,707,638	1,872,370	2,091,411	2,159,382	1,809,346	2,088,519	2,185,303	2,507,857	2,297,971	2,225,179	24,094,101	
1882.	1,839,469	1,720,675	1,969,737	2,054,687	2,342,298	2,229,105	2,020,000	2,277,000	2,474,000	2,474,000	2,474,000	2,474,000	2,474,000	
CHESAPEAKE AND OHIO:														
1880.	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308	
1881.	162,540	184,289	226,479	227,343	252,235	241,135	225,066	262,858	247,144	237,303	235,585	203,502	2,102,762	
1882.	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,771	305,065	305,065	305,065	305,065	305,065	
CHICAGO AND ALTON:														
1880.	534,054	497,013	626,473	542,661	616,128	617,524	708,906	761,120	767,349	785,199	606,776	574,695	7,718,198	
1881.	487,890	461,641	529,915	558,190	548,556	633,860	676,205	769,751	774,790	750,359	680,133	635,307	7,553,988	
1882.	570,447	530,480	584,483	561,787	553,412	613,886	671,537	800,624	881,109	881,109	881,109	881,109	881,109	
CHICAGO, BURLINGTON AND QUINCY:														
1880.	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,777	1,609,686	1,767,938	2,020,245	2,105,217	1,855,622	1,477,902	19,416,007	
1881.	1,240,664	963,204	1,178,795	1,474,612	1,879,006	2,306,440	1,983,034	2,315,164	2,292,676	2,341,098	2,019,938	1,855,477	21,849,209	
1882.	1,644,935	1,474,176	1,672,931	1,668,743	2,110,947	2,022,700	2,025,736	2,099,755	2,497,053	2,497,053	2,497,053	2,497,053	2,497,053	
CHICAGO, MILWAUKEE AND ST. PAUL:														
1880.	764,208	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119	
1881.	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,301	1,644,676	1,590,000	1,569,000	1,855,000	17,025,462	
1882.	1,435,000	1,377,000	1,561,000	1,518,000	1,629,000	1,620,000	1,465,000	1,545,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:														
1880.	193,827	173,078	259,783	259,208	232,146	218,093	236,995	251,013	300,833	342,056	342,894	312,173	3,122,097	
1881.	257,786	251,594	251,211	350,124	404,562	383,202	385,580	373,370	382,714	380,733	391,950	3,981,206		
1882.	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	482,997	482,997	482,997	482,997	482,997	
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:														
1880.	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185	
1881.	182,523	171,511	191,005	183,710	191,066	192,299	177,167	229,858	228,653	212,606	194,805	192,623	2,269,916	
1882.	200,042	186,798	208,066	204,269	199,110	206,594	209,564	259,379	259,379	259,379	259,379	259,379	259,379	
DENVER AND RIO GRANDE:														
1880.	124,759	126,922	160,883	164,882	193,925	204,455	373,132	400,133	406,483	473,318	408,562	349,196	3,478,007	
1881.	307,476	317,681	398,493	433,111	514,767	584,230	548,284	606,193	589,287	665,686	566,819	643,417	6,206,812	
1882.	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,040	595,306	599,191	599,191	599,191	599,191	
HANNIBAL AND ST. JOSEPH:														
1880.	176,079	166,965	216,061	206,735	191,317	179,396	224,312	233,448	242,214	207,147	279,635	2,561,366		
1881.	154,401	132,874	171,356	190,812	172,950	190,740	201,899	210,240	215,103	313,433	201,782	180,376	2,230,961	
1882.	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	239,196	239,196	239,196	239,196	239,196	
ILLINOIS CENTRAL:														
1880.	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812	
1881.	631,281	524,499	557,789	602,493	673,259	803,887	720,004	868,407	828,847	815,238	737,218	763,475	8,586,397	
1882.	728,173	689,387	695,371	674,603	663,746	752,251	813,600	828,238	828,238	828,238	828,238	828,238	828,238	
INDIANA, BLOOMINGTON AND WESTERN:														
1880.	80,498	80,600	116,185	90,374	85,733	106,054	103,438	116,732	110,622	121,343	95,621	104,619	1,233,079	
1881.	90,283	83,261	192,085	203,677	200,664	199,846	199,125	272,114	247,932	215,103	215,103	156,697	156,697	
1882.	195,824	175,755	200,235	205,934	185,554	186,133	206,072	278,814	273,100	273,100	273,100	273,100	273,100	
LOUISVILLE AND NASHVILLE:														
1880.	674,455	575,035	612,593	563,883	655,014	976,229	772,538	827,089	931,911	1,000,327	953,087	949,185	9,491,346	
1881.	812,118	805,124	947,959	855,704	828,726	1,227,885	817,135	876,102	951,566	1,002,950	1,005,223	1,153,779	11,344,366	
1882.	964,527	960,315	1,068,834	953,603	958,130	1,215,490	1,038,385	1,107,985	1,107,985	1,107,985	1,107,985	1,107,985	1,107,985	
MORILLE AND OHIO:														
1880.	250,116	204,095	168,302	140,091	129,248	121,855	131,621	140,593	184,247	264,714	251,368	287,372	2,273,622	
1881.	224,347	210,708	230,916	203,551	145,803	130,517	135,549	160,769	210,262	256,924	202,986	258,812	2,403,224	
1882.	150,676	148,590	148,166	141,957	134,378	136,184	136,398	140,443	160,031	156,201	156,201	156,201	156,201	
NASHVILLE, CHATTANOOGA AND ST. LOUIS:														
1880.	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484	
1881.	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256	
1882.	156,994	159,961	161,005	154,155	137,045	119,074	160,991	168,304	168,999	168,999	168,999	168,999	168,999	
NEW YORK AND NEW ENGLAND:														
1880.	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,491	215,491	210,850	198,108	2,396,302	
1881.	180,749	212,019	216,013	217,185	213,518	215,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255	
1882.	213,840	217,261	265,222	263,544	283,244	290,060	340,920	353,746	338,490	338,490	338,490	338,490	338,490	
NEW YORK, LAKE ERIE AND WESTERN:														
1880.	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,308,224	16,509,127	
1881.	1,260,381	1,252,218	1,449,958	1,643,151	1,592,544	1,661,872	1,500,976	1,606,874	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361	
1882.														

## Northwestern Telegraph Co.

In consequence of the growing necessity for direct telegraphic communication between Ontario and Manitoba, the great Northwestern Telegraph Company propose laying a submarine cable in Lake Superior, under the charter of the company, to connect Fort William, Manitoba, with Ontario. The telegraphic system requires 600 miles of line, with a cable, and another link along the Canada Pacific Railway over the Rocky Mountains, together with the existing system in British Columbia. Telegraphic communication on Canadian soil and waters, from ocean to ocean, would thus be secured. The practicability of the scheme has been admitted by eminent engineers. The proposed line for the laying of the cable is from some point on the Indian Peninsula, northwest of Owen Sound, connecting with land lines along the Manitoulin islands and small cable links to Sault Ste Marie, thence by one cable through Lake Superior to Thunder Bay. The estimated cost of the cable is \$400,000.

THE Baltimore and Ohio Railroad authorities say it is a brother of the late Commodore Vanderbilt who is interested with them in telegraph and railroad enterprises on Staten Island, New York. Mr. Vanderbilt is president of a railroad in that section which is utilizing the flats and water front on the south side of the island. The telegraph line is to pass through the island with offices at Stapleton and Clifton.

THE Mathews Cotton Mill, at Selma, Ala., is to have its capital stock increased to \$300,000. The mill is in a very prosperous condition. It is the purpose of those in charge of affairs to build another mill in addition to the one already in operation, and to make more and greater variety of goods, such as checks and plaids.

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Telegraph and Telephone Apparatus  
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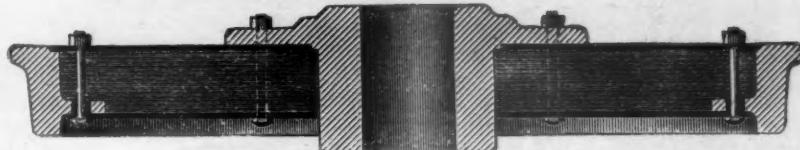
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Especially adapted for Sleeping and Drawing Room Cars, Locomotive and Tender Trucks, Steel Tire, with annular web—strongest, most durable and economical wheel in use. Works at Hudson, N. Y.; and at Pullman (near Chicago) and Morris, Ill.

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Will prevent Railroad Accidents and Save Life.

"The McLeod Air Signal is an ingenious and inexpensive device by which the coming of a train is announced far in advance, both by visible and audible signals." [Mass. R. R. Com. Report.]

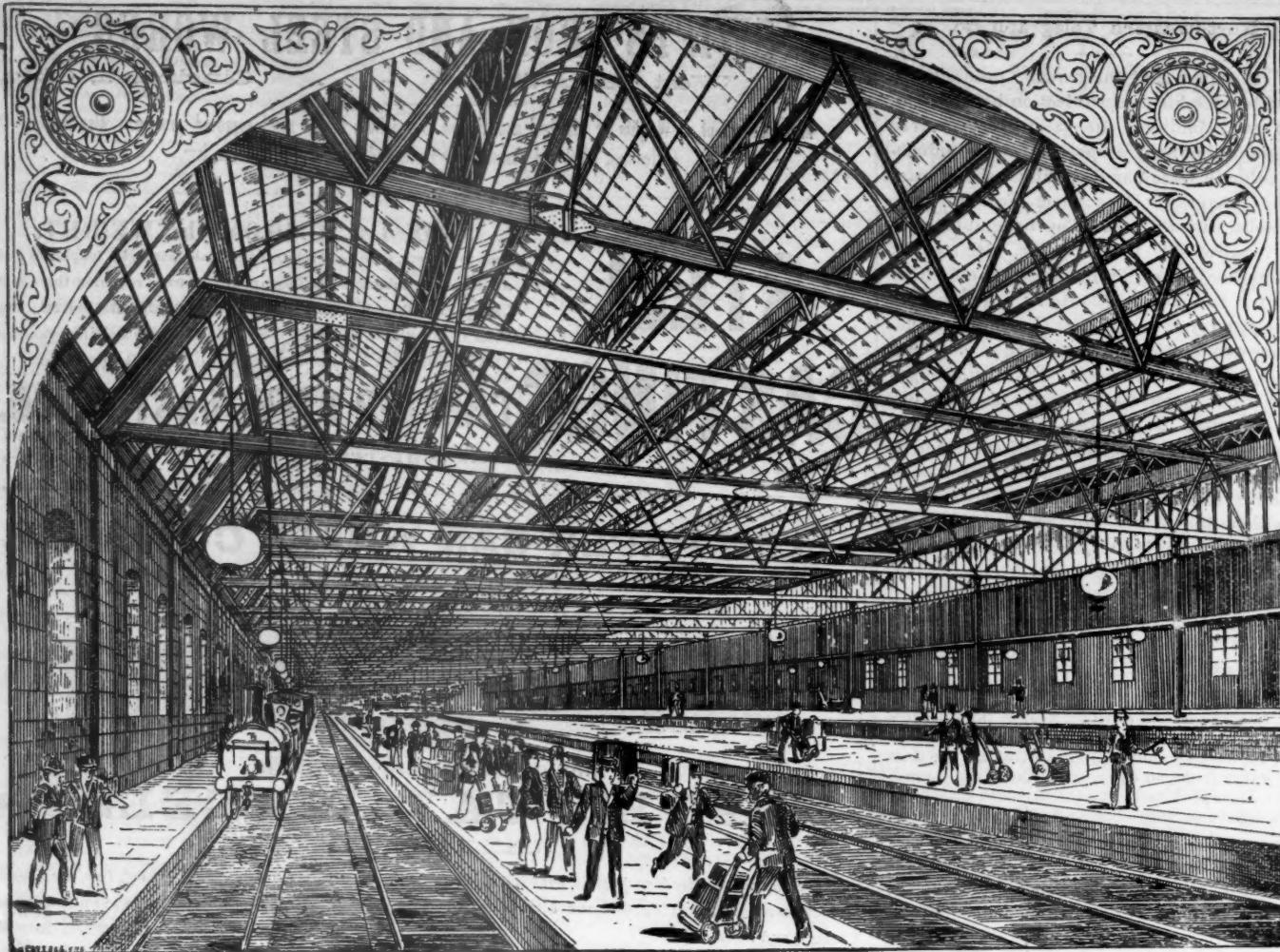
This signal has been fully tested on the New York and New England Railroad at Dudley and Bird Streets, by practical operation, and has proved a complete success, to the entire satisfaction of the many prominent Railroad men and experts who have watched and examined it. It provides an Automatic Block, Crossing, Station, Switch, Bridge, Yard and Curve Signals, Gate and Revolving Lanterns. Being operated by the weight of trains passing over an incline bar, forcing a current of air through a tube, by means of a bellows, which is positive in its action, it is highly commended by all railroad officials who examined it.

The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

## McLEOD AIR RAILROAD SIGNAL CO.,

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New York Office with Col. Thos. R. Sharp, 115 Broadway



BRIDGE STREET STATION, GLASGOW. GLAZED ON RENDLE'S SYSTEM WITHOUT PUTTY. AREA OF GLASS, 100,000 FEET.

#### Glazing Without Putty.

A. E. RENDLE, No. 7 Warren street, New York City, has introduced into this country a system of glazing without putty, which has found great favor in Great Britain and other European countries. The system has not been in use in this country very long, but wherever it has been adapted it has met with great favor, and carried off full honors at every exposition in which it has been shown.

The invention is very simple. Copper bars about half an inch wide are used on metal purlins, running in the direction of the slope of the roof; these have curvatures below on each side which take any water that may find its way into them, completely preventing any drip, the condensed moisture accummulating on one pane of glass passing on to the outside of the one immediately below it. The ingeniously contrived grooves admit of the glass being slipped in, where it is held with sufficient firmness, yet in case of breaking can be replaced by any one without the aid of a glazier. As no perishable substance is exposed to the weather, the cost of keeping such a roof in repair must be considerably lessened, and the elastic bed on which the glass rests prevents many fractures.

The entire roof of the Carlisle Citadel Station belonging to the Caledonian Railway Company of Great Britain, a huge structure covering

nearly seven acres of ground, is of glass, glazed on Mr. Rendle's system. Three hundred and twenty-two thousand square feet of glass were used in this work. We present herewith a picture of the structure.

It is not necessary to give a list of the many buildings abroad and already in this country, in which Mr. Rendle's system of glazing without putty has been used. The following letter addressed to him by Willis P. Tharp, engineer and superintendent Union Depot, Cincinnati, of the Cincinnati, Indianapolis, St. Louis and Chicago Railroad, gives, as clearly as can be, the opinion of a competent judge, of the value of Mr. Rendle's invention:

"I made a personal and thorough examination of your system of glass roofing as used in the depots at Buffalo and Cleveland, and am pleased to say that the result has been very satisfactory to me, as I am convinced that your system of glass skylight or roof is the best of which I have knowledge. As a railroad engineer and depot architect, I take pleasure in recommending it for depot buildings, and as the result of thorough examination, would say that it has been adopted for use as roofing for our new passenger shed connected with the new Union Depot now building in Cincinnati, and you are hereby notified to proceed at once to finish the same as required." The letter bears date September 1, 1882.

ADVERTISE IN THE RAILROAD JOURNAL.

#### Pennsylvania Railroad.

THE statement of the business of all the lines of the Pennsylvania Railroad Company east of Pittsburgh and Erie, for September, 1882, as compared with the same month in 1881, shows: An increase in gross earnings of..... \$682,596 An increase in expenses of..... 411,347

An increase in net earnings of..... \$271,249

The nine months of 1882, as compared with the same period in 1881, show:

An increase in gross earnings of..... \$3,009,540 An increase in expenses of..... 2,800,844

An increase in net earnings of..... \$208,666

All lines west of Pittsburgh and Erie for the nine months of 1882 show a surplus over all liabilities of \$943,281, being a decrease as compared with the same period in 1881 of \$1,325,502.

THE Light and Force Company, No. 234 Broadway, New York City, are distributing a pamphlet entitled "Faure's Electric Accumulator," which contains particulars of this invention and of its many and various uses in every day life. We notice that an account of the recent successful experiment in lighting a car on the Pennsylvania Railroad, by means of the Accumulator, finds place in this singularly interesting and, we may add, elegant production. With respect to its letter-press and mechanical merits generally, as well as its literary style and quality, this is a remarkably good specimen of the business pamphlet.



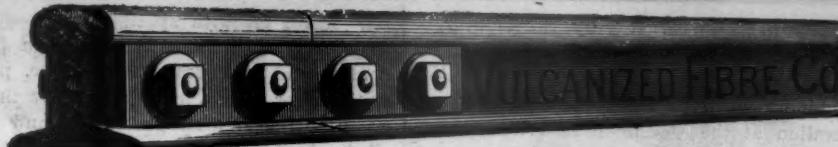
SUBSCRIPTION PRICE REDUCED  
—FROM—  
**\$5 to \$3.**

The American Railroad Journal,  
WITH ITS VARIETY OF  
New Departments,  
AND ITS  
NEW DRESS,  
HAS ASSUMED NEW PROPORTIONS.

We are amply justified in reducing the price from its old time rate of \$5.00 per year to \$3.00, on account of the numerous indications we are receiving of late of the increased interest that is being taken in the JOURNAL, which warrants us in believing that the sacrifice we make in price will be much more than compensated for by the promised liberal increase in the number of subscribers. It is gratifying to us to know that the alterations made in the JOURNAL during the past year are meeting with such general favor as is expressed in the frequent words of commendation and congratulation sent to us from old and new readers, and we feel called upon to try in every way to merit their approval and to spare no pains to place the paper before as many as possible of those who might derive benefit and profit from it. During its fifty years' experience the JOURNAL has been highly favored by an especially choice class of readers, counting among its subscribers some of the most noted banking houses, commercial bodies, financiers, and railroad men of this country and Europe. Its aim in the future will be to prove itself of more value and interest than ever to its patrons of many years standing, while by its new features it makes itself of service and interest to a broader field and to more varied departments of life and business. We desire to make the JOURNAL as useful and welcome as possible to our readers and advertising patrons, and to this end we hope to have our columns of correspondence, communications and general information full and diversified. The columns we have devoted to general communications have proved especially interesting and popular of late, and we are pleased to have our readers favor this department with suitable contributions.

We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for \$1. Try it, and you will be glad to continue taking it.



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**IMPROVED VULCANIZED FIBRE TRACK-BOLT WASHERS**,  
which form non-metallic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

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Prints Black, Violet, or Red, from the original writing, Autograph Fac-simile Circulars, Prices Current, Music, Drawings, School Examination Papers, etc., in a common copying press, at the rate of 500 per hour. The most rapid, simple, and economical process known 1000 to 5000 printed from a single writing. The Simmons Hardware Co., of St. Louis, says of it: "Our Papyrograph, purchased some time since, gives entire satisfaction. Would not be without it for \$1,000 a year." For specimens of work, price-list, etc., address, with stamp, THE PAPYROGRAPH CO., 41 to 45 SHETUCKET STREET, NORWICH, CONN. Local Agents wanted.



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A copy of the advertisement, a list of the papers, the space the advertisement is to occupy and the time it is to appear, should all be given with the application for an estimate of the cost.

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RUBBER CLOTHING, LACE  
LEATHER, BELT HOOKS,

RAILROAD, MINING, AND  
MILL SUPPLIES.

NO. 21 Park Place,  
NEW YORK.

## Stopping the Engine by Electricity.

AN ingenious method of instantly stopping machinery when in motion is said to be in operation at the Dominion Bolt Works, Toronto. A wire rope, coiled around the stem of the throttle valve of the engine, carries a weight which is held in place by a rest, and the whole arrangement is so placed that the passing of an electric current along a wire releases this rest and causes the weight to fall. The tension thus thrown upon the wire rope acts upon the throttle valve, cuts off the supply of steam, and consequently stops the machinery. Buttons, with wire connections, are placed in different parts of the works, and on pressing any one of these the passage of an electric current acts as above mentioned. In any factory these electric buttons can be placed in every room, or several of them in a large room, as may be required. Should any one happen to get caught by the machinery, the simple pressing of a button in the most distant part of the factory will stop the whole as quickly as could be done were the engineer standing ready to instantly obey a given signal.—*Scientific American.*

## The Fontaine Engine.

AN attempt at fast speed was made with the new Fontaine engine No. 2, on the Canada Southern, between St. Thomas and Amherstburg, on Tuesday of last week. The intention was to beat all previous records, either in this country or in Europe, but owing to hot boxes on the tender, the effort had to be abandoned, though some very good time was made. The Detroit *Free Press* thus describes the test:—

The first mile out of St. Thomas is slow. Beyond it is the lofty trestle bridge, which also limits speed, but after that is crossed every watch in the company is taken out—the mile posts are scanned—the seconds counted. A mile in fifty-seven, a mile in fifty-five, a mile in fifty-five! Let her go, the track is perfect! We care not how fast earth spins backward from our winged wheels. Sixty miles an hour will not satisfy, nor sixty-five, some say seventy, but the most hope for seventy-five. But it is not to be; the journals of the tender are again working badly—two of them are on fire. We stop at St. Clair Junction to cool them and repack. Superintendent Carroll announces that the engine is in perfect order and capable of indefinite speed, but the recurrence of hot boxes makes it unsafe to run very fast. The trial, therefore, is off. We will make the Detroit River in good time, but no unusual effort will be permitted. That settles the question for this trip. A half of eighteen minutes, and a new start is taken, in which after running four miles at regular speed and everything proving all right, Deyell lets her out again and we make five miles between Sheldon and Iona in four minutes. Further signs of hot boxes cause a check, and we run past stations as follows: Six miles in seven minutes, seven miles in eight minutes, four miles in four minutes and a half, and four miles in four minutes, then slower again. More hot boxes and a stop at Charing Cross of twenty-five minutes to cool

off. Again off with speed quite evenly regulated, showing the "Fontaine" in perfect control and with great reserve force, passing station after station just a trifle below the mile a minute rate. Boxes getting hot and hotter all the time, necessitated another stop at Essex Center of nine minutes. The particulars of the run are about the same as before, with a slow and measured rate during the last mile within the station yard. The arbitrary showing and the getting under way again after the several detentions made bad work of a time record." New axles with larger journals will be put under the tender, and as soon as they have worn smooth another effort at fast time will be made.

## The Ashton Blow-Back Valve.

H. G. ASHTON, general manager of the Ashton Valve Company, in a communication to the *World* dated October 24, contradicts the statement previously published in that paper that the late accident on the Pennsylvania Railroad was caused by "the irregular action of a contrivance recently introduced on all the engines of the road, called the Ashton blow-back." The cause of the accident was, he says, as stated in the first part of the article referred to, "the sudden shutting off of steam" to the cylinders, with a heavy fire of fresh coal, while the furnace door was open, and the smoke and gas in the fire-box being of too great volume to pass through the tubes and out of the smoke-stack; consequently it burst through the furnace-hole. He says the same is liable to occur to any locomotive, whether equipped with the "blow-back" attachment or not, as every engineer well knows.

The above statements, he adds, can be verified by applying to the officers of the Pennsylvania Railroad. The managers of that corporation have never been known to apply "contrivances," and this invention has been in use on the Pennsylvania Railroad the past four years.

"Do you buy your music by the roll?" inquired a young lady of the deacon's daughter. "Oh, no," she replied, "I always wait until Sunday, and then I get it by the choir."

## Norfolk and Western Railroad.

THE gross earnings, expenses and net earnings of the Norfolk and Western Railroad for the months of September, 1881 and 1882, were—

	1882.	1881.
Gross earnings.....	\$232,774 12	\$221,437 97
Expenses.....	112,005 64	97,529 65

Net earnings..... \$120,168 48 \$123,908 32

For the nine months from January 1 to September 30, 1881 and 1882, the gross earnings, expenses and net earnings were—

	1882.	1881.
Gross earnings.....	\$671,429 10	\$1,586,065 65
Expenses.....	946,437 84	845,925 59

Net earnings..... \$724,991 26 \$740,139 46

—showing an increase for the month in gross earnings of \$11,336.15 and in expenses of \$15,675.97, making the decrease in net earnings \$3,739.84; and for the nine months an increase in the gross earnings of \$85,364.05, with an increase in expenses of \$100,512.25, making a decrease in the net earnings of \$15,148.20.

## Philadelphia and Erie Railroad.

THE Philadelphia and Erie Railroad Company makes the following exhibit of business for the month of September, 1882:

	1882.	1881.
Gross earnings.....	\$386,454 86	\$36,862 61
Gross expenses.....	236,862 61	

Net earnings..... \$149,592 25

Net earnings, 1881..... 63,260 10

Increase..... \$86,332 15

Net earnings four months of 1882..... \$1,070,501 25

Net earnings four months of 1881..... 802,102 39

Increase..... \$268,398 86

SHE won the wager: Fred. Flasher and Miss Florentia Flounce were discussing the mental power of controlling thought. Said Flasher:—"I will give you a pair of gloves if you can think of positively nothing for five minutes and still be awake." "Done," she responded. Five minutes passed. "I've won the gloves," she exclaimed. "How did you manage to think of nothing for the whole five minutes?" he asked eagerly. "I fastened my mind firmly on your mustache and kept it there," she replied, triumphantly. The referee awarded her the gloves.—*Detroit Free Press.*

## The D. K. Miller Improved Padlock.

SUPERIOR TO EVERY OTHER

In Mechanical Construction, Security, and Durability.

MADE OF BRASS,

With Springs of the Celebrated Phosphor-Bronze,

And Warranted to Stand in Every Climate.

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"36 per cent of coal saved and the car kept noticeably warmer!"

by using THE SALMON CAR HEATER.  
It Insures Safety from Fire in case of Accident,  
Economy in Fuel and RAPID CIRCULATION. It heats quickly, is SELF-REGULATING, and can be used for either STEAM OR HOT WATER.

The Water Tubes do not come in contact with the Coals, but occupy the Smoke Flue in such a manner as to absorb the greatest amount of heat from Coal in a low state of combustion without danger of chilling the fire.

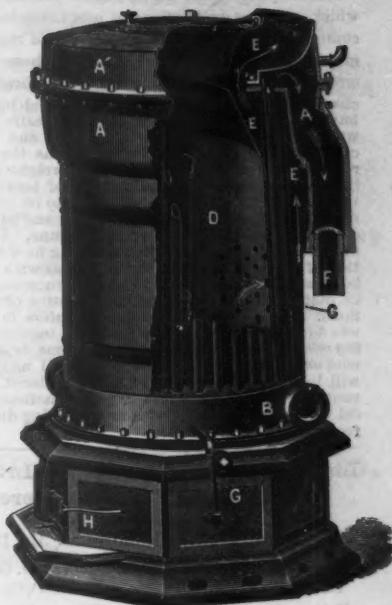
Once filled with coal the fire will last from 24 to 60 hours, according to weather, without replenishing, as proved by actual test.

At the last "Mechanics' Fair" it received the Silver Medal, being the highest award to heaters of any kind.

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CAR  
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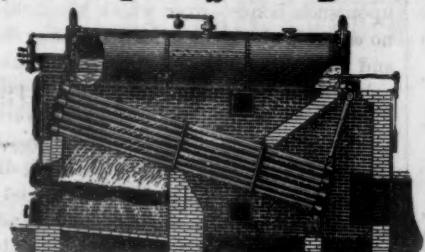
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WITH MAIN TRACKS UNBROKEN.**

Railroad Crossings, Frogs, and other Railroad Supplies,  
MANUFACTURED BY THE  
**WHARTON RAILROAD SWITCH CO.,**  
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Address, Munn & Co., publishers of Scientific American, 261 Broadway, New York. Handbook about patents mailed free.

## IMPORTANT ANNOUNCEMENT TO INVENTORS.

THAT department of the AMERICAN RAILROAD JOURNAL which contains descriptions of new inventions properly coming within its range of subjects, is regarded with great notice and favor, particularly by those directly interested in learning what the latest applications of mechanical ingenuity in railroading are, and by those who have produced inventions which they desire to make as widely known as possible. The large and widespread circulation of this paper, its prestige as the oldest railroad journal in the world, and the weight attached to its contents by the general consent of leading railroad men in all countries, give such value to its carefully prepared descriptions of new machinery and appliances as cannot be found outside of its columns. The interest manifested by inventors in supplying us with information of their doings, and the eagerness with which this is received, encourage us to give an increased attention to that department of this paper treating of new inventions. *We therefore repeat our invitation to all persons who have produced what they regard as improvements coming within the range of railroad operations, to communicate with us promptly regarding the same.* All matter sent us will be thoroughly examined and considered, and no inventions in our opinion likely to be practicable and useful will be passed over without receiving due attention from us.

## List of Recent Patents for Inventions Relating to Railway Interests.

BEARING DATE OF OCTOBER 31, 1882.

266,607. Running-Gear for Cars: Eleazer D. Carter, Terre Haute, Ind. Filed June 27, 1882.

266,610. Step Attachment for Railway Cars: Frank W. Coolbaugh, Hoboken, N. J. Filed Mar. 6, 1882.

266,621. Railroad Scraper and Leveler: Daniel L. Harris and Eleazer D. Carter, Terre Haute, Ind. Filed July 1, 1882.

266,626. Rail-Joint: George N. Hodgdon, Nashua, N. H. Filed May 25, 1882.

266,645. Traction Railway Apparatus: Charles W. Rasmussen, Chicago, Ill. Filed Feb. 7, 1882.

266,684. Automatic Air Brake for Railway Cars: Walter J. Ford, Concord, Tenn. Filed May 24, 1882.

266,685. Locomotive Engine: Matthias N. Forney, New York, N. Y. Filed Aug. 26, 1882.

266,694. Life-Guard and Track Clearer: Charles W. Held, Jr., Brooklyn, N. Y. Filed April 16, 1880. Renewed May 1, 1882.

266,719. Signal Lamp: Edward S. Piper, Toronto, Ontario, Canada. Filed April 27, 1882.

266,720. Car-Coupling: Leaney Recht, Platte City, Mo. Filed July 27, 1882.

266,742. Freight Car: Thomas L. Wilson, Port Hope, Ontario, assignor of one-half to Eugene Harman Davis, Toronto, Canada. Filed July 15, 1882.

266,749. Dumping Car: John E. Bemis, Waupun, Wis. Filed May 8, 1882.

266,768. Automatic Oiler for Locomotive Engines: A. Hamilton Campbell, Waynesborough, Pa. Filed Sept. 21, 1882.

266,776. Car Wheel: Alfredo Cottrau, Naples, Italy. Filed May 22, 1882.

266,780. Nut Lock: Levis H. Davis, West Chester, Pa. Filed Sept. 22, 1882.

266,786. Guard for Car Platforms: John B. Driscoll, New York, N. Y. Filed June 23, 1882.

266,787. Railroad Car Chimney: Charles A. Dubey Brooklyn, N. Y. Filed Aug. 22, 1882.

266,803. Railway Toll-Tale: Matthias N. Forney, New York, N. Y. Filed Dec. 22, 1881.

266,806. Railroad Train Electric Signaling Apparatus: Ezra T. Gilliland, Indianapolis, Ind. Filed June 15, 1882.

266,822. Car Coupling: Lewis I. Hinkle, Piedmont, Mo. Filed Aug. 17, 1882.

266,823. Car-Coupling: George K. Hoff, Philadelphia, Pa. Filed Aug. 24, 1882.

266,839. Car Coupling: Daniel E. Kelley, Gaylord, Kans. Filed Aug. 26, 1882.

266,897. Draw-Bar for Railway Cars: Eben B. Sankey, Salem, Mo. Filed Aug. 28, 1882.

266,904. Electric Railway Signaling Apparatus: Charles A. Scott, Boston, Mass. Filed Nov. 23, 1881.

266,905. Petticoat-Pipe for Locomotive Engines: Albert J. Seaman, Stanford, Ky. Filed July 24, 1882.

266,931. Car Coupling: George W. Watts, Durham, N. C. Filed Sept. 6, 1882.

## Municipal Bonds.

A DECISION was rendered in the Supreme Court of the United States at Washington, on the 30th ult., in case No. 694—the City of Ottawa, plaintiff in error, vs. W. H. Cary—in error to the Circuit Court for the Northern District of Illinois. The bonds upon which this suit is brought were issued by the city of Ottawa, a municipal corporation of the State of Illinois, and belong to the same issue as those involved in Hackett vs. Ottawa, 99, U. S. 86, and in Ottawa vs. First National Bank of Portsmouth, N. H., 105 U. S. In each of those cases the holders were protected against the defences interposed, mainly upon the ground that, being *bona fide* purchasers for value, the city was estopped by the recitals in the bonds from saying that they were not executed for proper or legitimate municipal purposes. In the present case, however, Cary was not a *bona fide* holder entitled to the benefit of the ruling announced in Hackett vs. Ottawa and Ottawa vs. First National Bank of Portsmouth. The judgment is reversed, with directions to give judgment upon the special finding of fact for the city. Opinion by Justice Harlan.

## Taxing the Premiums on Government Bonds.

THE New York Court of Appeals has decided against the legality of taxing the premiums on Government bonds. The Court—Justice Earle delivering the opinion—dwells upon the fact that it is a mere accident that government bonds are above par. They may, in the market, be worth more or less than par, and they may fluctuate from week to week and month to month, depending upon the condition of trade, commerce, finance and other matters. The fact that they are above par may be due to the plethora and cheapness of money, and not to any actual increase in value as compared with a fixed standard. When, therefore, a government loan is put upon the market, it is plain to be seen that it might be materially affected if it were known that, whenever the bonds to be issued should in the market from any cause happen to be at a premium, when the assessors come to make their assessment, such premium could be assessed and taxed. Such a tax, the court holds, would affect the value of the bonds and embarrass the government in effecting a loan, in the same way, if not in the same degree, that a tax upon the bonds, *ex nomine*, would. His honor then goes on to say:

"It is clear, therefore, that if the premiums upon such bonds—over which the holder has no control, which can neither create or destroy, and which do not really indicate any enhanced value of the bonds—can be taxed, the policy of the law, as to the exemption of government securities from taxation, would be greatly violated. The premium is not something distinct from the bond and which cannot exist apart from the bond: it is inherent in it and goes with it. When the confidence of the public in it is destroyed, that is destroyed. When the bond is transferred, that goes along, and as the bond approaches maturity it vanishes. The premium is part of the entire value of the bond,

and when that is taxed the bond is taxed, or what is equally condemned, the value or a part of the value of the bond is taxed. A conception of the premium upon the bond as a distinct entity for the purpose of taxation is too transcendental and metaphysical for common comprehension and judicial cognizance."

## Artificial Fuel.

THE utilization of waste coal is a matter of great interest to the people of this and of all countries in which manufactures are a leading occupation. A problem of great difficulty has been solved by the invention of the Artificial Fuel manufactured by the Loiseau Fuel Company, of Philadelphia, Penn. This is made from the dust of anthracite coal by a process upon which letters patent have been granted by the United States authorities, to Mr. E. F. Loiseau, a resident of the Quaker City.

Great interest has been manifested in the recent use of this Artificial Fuel, exhibited at the American Institute Fair held in New York City. It was burned under the boilers of the huge building with complete success. The crowds of people who saw it in actual use were particularly impressed with the fact of its adaptation to domestic purposes as well as purposes of manufacture.

Mr. Loiseau's fuel is in lumps of an egg-shaped form, which can be made to vary in weight from two ounces to a pound. As at present manufactured, the first-named is the weight of the lump. From seventy-five tons to three hundred tons of the fuel can be produced every day, made of anthracite coal dust, bituminous coal dust, coke dust, brown coal or lignite dust. These are solidified so perfectly by the Loiseau process that the lumps will not crumble but will retain their shape in the fire until consumed. Different proportions of all kinds of coal dust can be mixed together and compressed into lumps to suit the requirements of modern industry.

The value of the process in the arts extends beyond the mere production of fuel. Rejected ores, such as the washings of hematite ore, the granulated ores and the black sand ores, can be solidified by its means; and ores of all kinds can be pulverized, mixed with coal dust in required proportions and then compressed, and the metals which these ores contain can thus be obtained, as is stated, at less cost and of more regular and better quality than by other processes. The ores can be pulverized either in their raw state or after being roasted and freed from most of the impurities by washing before being compressed. By the Loiseau process, wrought iron can be obtained direct from the ore.

The Loiseau Fuel Co., Port Richmond, Philadelphia, own the patent right for the States of New York, New Jersey, Pennsylvania, Ohio, Maryland, Virginia and West Virginia, and grant licenses in these States. Mr. E. F. Loiseau, No. 1,320 Girard Avenue, Philadelphia, grants licenses in all the other States of the Union, or for the sale of States-rights.

THE Railway Benevolent Association has decided to erect a railroad hospital at Miles City

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**The Monarch of the Baggage.**

THOSE who have traveled overland from New York to San Francisco have a vivid recollection of the man who weighs the baggage at Council Bluffs, the eastern terminus of the Union Pacific Railroad. He is to all intents and purposes the monarch of the immense piles of baggage which he surveys. Travelers tremble in his presence, and find no escape from him. They can continue their journey westward over but one road—the Union Pacific, which becomes the Central Pacific at Ogden. There are no competing lines. It is, perhaps, true, beyond the infliction of a doubt, that in nine cases out of ten travelers find themselves compelled at Council Bluffs to pay for "extra" baggage, or are compelled to send as freight or express goods, articles which had been checked through from New York as baggage. Upon purchasing a first-class passage ticket at a railroad office in this city the traveler has his baggage checked through upon most liberal terms. In the serene and happy consciousness that the path to San Francisco is lined with baggage men and ticket agents as affable and generous as those he encountered in this city, the traveler steps aboard the train and starts on his journey. When he reaches Council Bluffs and discovers himself on the outskirts of civilization, he also discovers the monarch who asserts his right to collect extra money for baggage or who tosses aside articles which he declares can go no further except as freight or express goods. This monarch declares, in all truthfulness, that he merely obeys the laws made for him by the railroad officials of the Union and Central Pacific railroads.

One incident will serve to show how easily the traveler may find it difficult to proceed without paying an extra assessment at Council Bluffs. George L. Brander, the vice-president of the Nevada Bank of San Francisco—the financial institution of the Bonanza Kings, among whom are John W. Mackey, James C. Flood, and Senator James G. Fair—had some experience with the baggage monarch some time ago. Mr. Brander is a tall young Scotchman who was born and bred in the banking business. He is well known among financiers in this city and in San Francisco. He is plain in manner and speech, and assumes to be nothing but a matter-of-fact business man. When taking his wife and his child's nurse to San Francisco from this city he purchased three first-class passage tickets. In his baggage was a child's carriage, such as nurse girls roll through Central Park. It was small in size, light in weight, and was made much smaller by being taken apart, and not much heavier by being placed in a wooden frame. He had paid \$26 for it, and the cheerful baggage-man at this point promptly checked it through. When Mr. Brander reached Council Bluffs the wagon was pushed aside, and he was informed that it could continue on its way only as freight or express goods. Inquiry revealed the fact that if it should be sent as freight it might reach San Francisco three or four weeks after Mr. Brander's arrival in that city. If it should be sent by express the charges would be \$26, the cost of the carriage. There was no appeal

from the baggage monarch's decision. Mr. Brander protested in vain that the carriage had been checked through from New York. Finding that the conduct of the baggage-man here might not be considered as proper at Council Bluffs, Mr. Brander determined to abandon the carriage. He had endeavored to persuade the monarch that it was his duty to charge extra baggage if the carriage weighed more than the amount which he was entitled to carry to San Francisco, but the monarch was immovable. Then Mr. Brander turned to a Council Bluffian, presented the carriage to him, and went on to California, where he purchased another carriage for his child. Mr. Brander, on a recent visit to this city, said that the Council Bluffs baggage-man was, perhaps, not at fault, but that the blame should, very likely, rest upon those in this city who accepted the carriage as baggage and checked it through. Those who contemplate a railroad trip to San Francisco will do well to heed the experience gained by Mr. Brander.

**Gold in the U. S. of Colombia.**

THE Organos mines are situated in the U. S. of Colombia, and have for neighbors some worked by private owners, which have proved extremely rich. The Frontino and Bolivia mines, and the Tolima, are not far off, and they are worked at a considerable monthly profit. The circumstances connected with the Organos mines appear still more favorable when contrasted with those surrounding the numerous similar enterprises which have been started in the Wynnaid and Mysore districts of India. The latter mines claim to possess lodes from which they can extract from two to three ounces of gold per ton. But the Organos directors speak of "two of the principal lodes assaying from one ounce to 500 ounces of fine gold per ton."

The margin is wide enough, but there are no metallic lodes of any other kind that vary so much as those producing gold. Hence it has been said that, according to the richness of a gold-bearing lode, the owners are either paupers or millionaires. The modified prospect of becoming the latter would appear to lie very distinctly before the fortunate possessors of Organos shares. A reference to our article on "Samples," published this week, will show how little importance we attach to the treatment of selected specimens of quartz; but when, as in the case of this company, twenty tons of quartz are passed through the stamps, under the supervision of a mining engineer of such eminence as Ezekiel Williamson, one cannot fail to be struck with the conclusive nature of the experiment. He believes the average value of the gold to be from two to two and one-half ounces. Now, here again comparison may be challenged, for the Indian gold mines, with a capital varying from £100,000, to £200,000, say they can pay on a yield of one ounce, and, therefore, it may be left to the reader to suppose what will be the return from the Organos mines from a lode averaging two ounces, and upon a capital stock of merely £15,000.

Mr. Williamson estimates the profits at £20,000, per annum, and should this rate not be exceeded it would be equal to a return of the

entire share capital each year, and a handsome bonus of twenty-five per cent besides. Such a prospect is sufficiently tempting to the most cautious of investors, and the first return equal to this amount, or anything like it, will justify the opinion expressed by the numerous experts that this is one of the richest gold mines yet introduced to the public. It may be well, in a few words, to summarize the opinions of the experts referred to. E. S. Jones states of one of the principal lodes: "This is a six-foot-wide quartz lode, containing much massive visible gold. There is scarcely a piece of quartz belonging to this lode of the minerals left by the Spaniards that does not contain visible gold." The opinion expressed by J. G. Green of the Buenaventura level is that "the lode in the end is the finest and best developed I have seen in the mine, and bears out to the letter what Mr. Williamson has written of it." F. G. Mills says of the same level: "The quartz still continues good. Esperanza level: Very rich mineral was brought out, and every time mineral was extracted there was abundance of visible gold. Te Encontre. This lode is very fine. I washed a sample of it, and it yielded two ounces of gold per ton. I have no doubt this sample would have assayed more than two ounces."—*Mining Record.*

**The Survival of the Fittest.**

WHEN the Atlantic express over the Central road reached Niles the other day a Detroit commercial traveler boarded the train to find every seat taken. In the center of one coach one seat was occupied by two satchels, and another by an overcoat and hat, while the owner of the articles was in the smoking-car. The Detroiter gathered up all the baggage and placed it on the wood-box, and occupied the seats with his own, and he had just got comfortably settled when the late occupant returned from his smoke. He saw what had occurred, and was white with anger, when he began:

"Who moved my baggage?"

"I did," was the reply.

"Sir, I represent the wholesale crockery house of Blank & Blank, of New York, and I—"

"I knew it—saw your name on the baggage," interrupted the other. "Haven't you seen the papers to day?"

"No sir."

"I thought not. Well your house has failed for \$288,000—can't pay twenty per cent on the dollar—bad bust—no time for you to swell over two seats—crowd in somewhere or stand by the stove, and when you get to Detroit I'll help you get a pass home. Sorry for you, and all that; but our house is rated A 1, and has a reserve of \$75,000 in mortgages; and the survival of the fittest is a principle older than the hills."—*Detroit Free Press.*

THE Cleveland, Youngstown and Pittsburgh Railway Company has, by purchase and consolidation, acquired the rights and properties of the Atlantic and Lake Erie Railroad and the Steubenville, Canton and Cleveland Railroad, thus giving the Cleveland, Youngstown and Pittsburgh Railway a short line between Lake Erie and the Ohio River.

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## Private Railroad Cars.

The construction of railroad cars for private use has become quite common. Within the past few years several have been built, and now any one who desires can own a car commensurate in value to his financial ability; for the railroad companies of the United States, if the usual rules as to method of construction are followed, will roll over their lines the car of any private owner. Many merchants and wealthy men have their private railroad coaches; they are also built for and owned by theatrical managers, traveling circus companies, and even some great stock dealers prefer to own their cars for transportation of live-stock. Breeders of fine horses have cars built especially for the carriage of their animals. Some of the wealthy actors and actresses have their own cars. The finest private cars, however, are those built by sleeping and palace car companies for rental, and by the officers of railway companies for their own use.

The private car of most convenience and elegance that has yet been turned out from the hands of American mechanics is that recently constructed at the works of the Central Pacific Railroad Company in Sacramento. It was built at the expense and to the order of Mrs. Leland Stanford. Its cost is stated to be between \$20,000 and \$25,000. It is undoubtedly the best example of car work ever presented, not only in finish, but in strength, convenience and the principles of construction. It was built under the immediate direction of Master Car Builder Ben. Welch, and the work is that of the men of his department, with such parts as were needed drawn from the department of Master Mechanic Stevens. The plans were adapted to the wishes of the owner and the suggestions of her husband, and were drawn by Fred Snauch. The cabinet work was done by the force of Victor Lenay, the painting and gilding by the force of W. C. Fitch, the plating by the force of Mr. Buchanan, the upholstery by the force of Isaac T. Crum, and the work was all personally supervised by Mr. Welch's general foreman, G. J. Turner.

As described by the Sacramento *Record-Union*, the car is 60 feet long, 70 over all, whereas the usual length of cars is 55 to 57½ feet. It is 12 feet in width inside, but the height is less than most Central Pacific Railroad cars, in order to insure its safe passage through eastern tunnels. It is what is known as a 12-wheeled car, there being six to each truck. The wheels are the Allen paper wheels, with 2½ inch steel tire, and have been tested with a pressure of 250 tons. Beneath the central section of the car are 16 feet of lockers for provision storage, and these may be reached either from the outside or through traps fitted in the floor. From the Baker heater, in one end of the car, pipes for heating and for hot water are conducted beneath the double floor for the warming of the car and for supplying each room with hot water. This idea of registers in the car floor is a new one, and in one sense experimental. The entire frame work is of Oregon pine, heavily ironed, there being especially strong corner irons, and its weight is between 33 and 35 tons. The car is in exterior finished in color and style

according to the standard of the Central Pacific Railroad, but, unlike most cars, the sides are smooth and the broken joints covered by iron strap set in by a new system of rabbetting, by which the opening of a joint cannot possibly show outside of an actual breaking up of the structure. The truss work and bracing is so complete that the car, notwithstanding its great length, when supported on jacks at either end showed no deflection from a level.

To give some idea of the great strength of this car, it may be added that there run from the sides over the entire top, every six feet, heavy iron carlins, and set rigidly into the side framing. One in looking at the exterior cannot fail to notice the inequality of the panels. There are no two of equal size, and no two spaces between the windows are equal in area. This is purposeful, and though in violation of the conventional rule, the effect is decidedly good, and breaks the usual monotony where the panels are regular. The style of the car is modified from the Queen Anne in architecture, and while extremely rich in finish is not at all gaudy; on the contrary plainness may said to prevail. There are eight windows on either side, and the glass is 28 by 38 inches. All the frames arch slightly at the upper corners, this concession being made to give ease and grace. The scroll-work of the exterior is in gold and rich colors, but it is not florid, nor is there a great profusion of it. Probably the very best work of the painter's art is shown in the lettering of the word "Stanford" on either side, and the words beneath the eaves "Central Pacific." The inner blinds to each window are of solid walnut, with English holly slats, and instead of lifting, these frames slide to one side and into the hollow walls of the car. The ends of the car are fitted with four-foot Miller platforms and hooks, with folding steps, and the car is supplied with the Westinghouse automatic brake. Each platform has heavy iron railings, with nickel-plated standards and polished rails and nickel-plated rosettes. The roof is what is known as a clear roof, with ventilators and dead-lights, as is used in sleepers.

Entering the car one passes, by a broad door set upon the left, the parlor, which is 8 feet 6 inches by 12. From this room there opens a door on the left into a hall a little over two feet in the clear and off of which to the right open bedrooms—one 6 feet 6 inches by 10 feet, and one 6 feet 6 inches by 8 feet, and a maid's room. At the other end the hall opens by a door into the dining-room, 8 feet 6 inches by 12 feet. Out of this room a second hall on the left opens and runs to the other end of the car. Off of this opens the porter's room, and next the kitchen, 6 feet 6 inches by 7 feet 6 inches. Then comes a niche for the Baker heater, and next a hall running along the end of the car, but the latter part of which is cut off for the water-closet. The inside finish is in the Queen Anne style. The parlor is finished throughout the entire interior, including the ceiling, in rosewood; the bedrooms, halls and dining-room in black-walnut and mahogany; the kitchen, porter's room, closets and heater-room, in "burl and curl" redwood. The finish is all in the very highest style of cabinetmaker's art, and is exceedingly rich. In part it has

been decorated, but time falling short here, the decorative work will be completed at the East. The capability of this finish for rich decorative work from the pencil of the artist is of the highest character.

The furniture will consist of sofas and chairs, in walnut and rosewood, and the usual bedroom furniture in like woods. Some of that put in here is but temporary, and will be supplanted at the East by furniture to be chosen. All the house hardware is nickel-plated, and the plating, all of which was done here, is of a character not surpassed by the best work done in any part of the world. The lighting is all by hurricane lamps, burning mineral seal oil. The lamps are of a style to compare with the style of the interior of the car. In the parlor and dining-room each are double hanging-lamps. In the first, also, is one and in the dining-room two side lights, and in each of the other rooms one side light. The dead-lights in the roof windows are especially beautiful. They are all protected on the outside by wire gauze. They are of what is known as tinted or stained glass, resembling the pearly translucence of the interior of a sea-shell, and are divided into scroll designs by lead lines, as in stained-glass windows. At the crossing of these curving seams are set large jewel stones of various hues. In the bedrooms, parlors and dining-room are set heavy plate mirrors, in moldings of walnut or rosewood, in the style of the interior finish. Electrical knobs in each room operate an electrical call in the porter's room and in the kitchen. In appropriate places are set standing basins, marble-topped and elegantly finished, and these are supplied by hidden pipes from a tank of large capacity. The upholstery is rich, and in keeping with the finish of the car; but only a part was put on here, considerable remaining to be supplied at the East. The carpets are the best Wilton, and match the finish of the interior. As a whole the car is one of chaste elegance, exceedingly rich and substantial finish, without any gaudy effects, and impresses one as having been constructed according to a refined taste, while it is testimony of the highest character to the ability and skill of mechanics of this city.

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THE loftiest active volcano is Popocatepetl—"smoking mountain"—thirty-five miles southwest of Pueblo, Mexico. It is 17,784 feet above the sea level and has a crater three miles in circumference and 1,000 feet deep.